Concepts of illness, dietry beliefs and food-related health practices : a study of health care professionals and the Chinese community in Britain.

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CONCEPTS OF ILLNESS, DIETARY BELIEFS AND FOOD-RELATED HEALTH PRACTICES

- A STUDY OF HEALTH CARE PROFESSIONALS AND THE CHINESE COMMUNITY IN BRITAIN

A THESIS SUBMITTED BY

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ABSTRACT

Traditionally, the Chinese have a highly developed set of beliefs about the maintenance of health and treatment of disease through the regulation of dietary patterns, exercise and sleep.

The purpose of this project was to investigate the persistence of dietary beliefs and the concepts of health and illness in the older members of the Chinese community in Britain. Since a substantial number of Chinese immigrants are now approaching middle and old age, it seems likely that they will increasingly come into contact with the health services.

Through a series of studies, the project has investigated the traditional concepts concerning prevention of disease and maintenance of health among a group of older members of the Chinese community in London. A second study explored the beliefs of a group of Chinese diabetic patients about the causation and treatment of the condition and the dietary advice received from health care professionals. In addition, studies were also undertaken of dietitians, Chinese and Caucasian doctors in order to explore their awareness and knowledge concerning Chinese ideas about diet and health and views about the provision of service within the National Health Services to ethnic Chinese patients.

Results showed that traditional beliefs did persist amongst the 145 elderly Chinese interviewed. The selection of foods to maintain health was considered to be important by 90% of subjects such that dietary manipulation was practised according to interviewees' age and constitution in addition to season of consumption. Dietary proscriptions were mostly based on the traditional concept of restoring body balance via the avoidance of excess "hot", "cold", "poisonous", "wet" and "supplementary" foods. The persistence of these traditional beliefs did not vary significantly between sexes or education. Commonly experienced ailments were mostly attributed to energy imbalance in the body and knowledge of dietary rules specific for the treatment of such conditions was found. Comparision of these dietary prescriptions with western management appeared to show congruence in practice. As regards the process of seeking medical care, most subjects were convinced of the efficacy of western medicine, even for conditions which were attributed a Chinese type aetiology based on the imbalance of energy circulating in the body. Dietary manipulation played either a complementary or secondary role in the process of treatment.

Of the 20 diabetic patients interviewed, 17 were found to be using traditional foods specific for the treatment of the condition. These included pork pancreas, red berry, bitter melon, pig's stomach and mountain yam. However, with regard to causality, the majority of subjects (80%) did not attribute the condition to the traditional explanation of energy imbalance, but rather to an excess consumption of sugar, fat and monosodium glutamate. Patients encountered several problems with the dietary advice received; this included recommendations to eat unfamiliar or unacceptable foods like brown rice and brown bread.

Results from the postal survey of dietitians showed that 33% of respondents replying to the questionnaire reported giving dietary advice to Chinese patients. Common problems requiring dietary advice included diabetes, obesity and coronary heart disease. Examples of Chinese foods advised for these patients included high fibre versions of rice and noodles. Aherence to dietary regimens were reported by respondents to be low. Less than half of these dietitians were familiar with the traditional Hot-Cold concept of foods and diseases.

In the postal survey of doctors, 45% of Chinese and 36% of Caucasian doctors replying reported advising Chinese patients. Less than a third of Caucasian respondents were familiar with the Hot-Cold concept. With regard to doctors' views concerning the adequacy of service provision by the National Health Service (NHS) to Chinese patients, more Caucasian doctors considered support services and interpreters to be adequate for the community. Chinese doctors believed that non-English speakers and the elderly required extra help from the NHS in the form of interpreters and health education materials translated into Chinese.

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INTRODUCTION

Estimates of the Chinese population vary, but the Office of Population Censuses and Surveys gave 100,000 as its "best estimate" in 1983 although the figure may now be much higher. There have been several phases of migration to Britain, but the largest influx consisted of young men and later their families, who arrived in the late 1950's and early 1960's, to work in the expanding Chinese restaurant trade.

Although the Chinese community has been characterised as a self sufficient one, it seems probable that demands on social and health services are likely to increase as this group approach middle and old age. The House of Commons Home Affairs Committee which reported in 1985 on the Chinese community in Britain commented on the lack of available information about the health and welfare of the Chinese community and their needs for health education.

Traditionally, the Chinese have a highly developed set of beliefs concerning the maintenance of health and treatment of disease, through the regulation of exercise, sleep and dietary patterns dating back to early texts such as the *Huang Ti Nei Ching Su Wen* (Veith, 1972). The persistence of such ideas has been documented in the United States by Koo (1984) and other workers. While in the United Kingdom, Tan and Wheeler (1984) have investigated the influence of traditional ideas on infant feeding practices of Chinese mothers living in London. As early immigrants approach middle and old age, it is probable that they will develop the same degenerative diseases as the indigenous population, the management of which commonly includes advice about dietary modification. However, since diet therapy is an important part of Chinese traditional medicine, it seems likely that these patients may retain traditional ideas about diet and health, possibly conflicting with western ideas. It is essential therefore to recognise the extent to which this minority group still adhere to and incorporate the ancient Chinese philosophies into their beliefs about diet and how this relates to western management of diseases in order to improve communication and effective dietary advice both in prevention and to enhance the therapeutic process. The purpose of this project was to examine the persistence of food related health beliefs in the elderly Chinese population in Britain and the extent to which health professionals were aware of such beliefs and felt able to accommodate them in patient management. Four studies were carried out and consisted of a study of elderly Chinese attending day centres; a study of diabetic Chinese

patients in two London hospitals; a study of dietitians and a comparative study of a group of Chinese and Caucasian doctors.

Chapter I of this thesis is devoted to a short review of the migration of the Chinese community to this country, demography, settlement, employment, family structure, language, social activities and health. Chinese cuisine and changes in food habits with migration is considered in Chapter II. Chapter III describes traditional Chinese concepts concerning the role of diet and the maintenance of health. Chapter IV describes the methodology involved in data collection, the pilot and main studies of elderly Chinese in London. Respondents characteristics, their dietary beliefs concerning traditional concepts in the maintenance of health is also considered in this chapter. Chapter V is devoted to respondents' beliefs regarding the traditional ideas in disease causation and management. A study of a group of diabetic patients is described in Chapter VI which outlines the methodology involved in data collection. It includes a description of the beliefs about causation and management of diabetes, dietary advice received, meal patterns and compliance with recommendations from health professionals. Chapter VII and VIII are devoted to studies of two groups of health care professionals. Chapter VII describes the survey of dietitians, the methodology of data collection, the pilot and main study. Respondents characteristics, contact with Chinese patients, conditions requiring dietary advice, details of dietary recommendations are also considered. Knowledge and awareness of traditional concepts regarding health and disease and the hospital meal service provided to Chinese patients are also detailed in this chapter. Chapter VIII gives an account of the study of a group of Chinese and Caucasian doctors. The methodology of data collection, the pilot and main study and respondents characteristics are described in this chapter which also considers their contact with Chinese patients, patterns of disease in the Chinese community, dietary advice, knowledge and awareness of traditional ideas concerning health and management of diseases and service provision by the National Health Services to Chinese patients. Chapter IX presents an overall discussion and areas for further research.

CHAPTER 1

THE CHINESE COMMUNITY IN BRITAIN

Introduction

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CHAPTER 1
THE CHINESE COMMUNITY IN BRITAIN

Introduction

The Chinese form the third largest ethnic minority group in Britain. Despite its growth over the last two decades, the Chinese population in the UK has received very little research attention. This chapter brings together the available information from the first days of immigration to present-day settlements. Due to the disparate sources available, some of the data are at variance especially with regard to population numbers.

1.1 History

Chinese migration to the UK can be traced back to as early as 1814 (Ng, 1968). It occurred in three distinct phases - a pre-World War II group consisting predominately of single men who came to Britain as sailors, and two post-World War II groups - namely single men emigrating for work (usually in the catering business) and latterly their wives and children.

1.1.1 Pre-World War II Arrivals: The First Phase

First to arrive from the early 19th century were Chinese seamen employed on British merchant ships because of the increasing competition in the expansion of trade with China. The practice of employing Chinese sailors grew since Chinese seamen could be recruited cheaply and conveniently. With the establishment by 1865 of the first steam ship service from Europe to China by Liverpool shipowners, the number of Chinese increased in Liverpool, London and Cardiff (Broady, 1955). By 1885, the first Chinese communities settled in London around Limehouse centering on Limehouse Causeway and Pennyfields (adjacent to The West India Docks). In Liverpool, the community was concentrated around Pitt Street, Nelson Street, Cleveland Square and Frederick Street. These settlements were geared to meeting the needs of Chinese seamen and shoregang workers who originated mainly from Mainland China (Chekiang and Fukien), Malaysia and Singapore (Ng, 1968). Lodging houses served as social centres for the seamen when they were ashore providing facilities for both opium smoking and gambling, food and laundries (Watson, 1977). This pattern of migration was brought to an end by the Aliens Restriction Act of 1914 which was still in force at the end of World War II.

With severe restrictions on immigration, the Chinese population in London and Liverpool declined during the interwar years. In the years after World War I, the laundry business dispersed from the major port areas of Liverpool, London, Cardiff and Bristol to smaller towns. By 1931, there were over 500 Chinese hand laundries in the UK (Taylor, 1987).

It was during the 1920's that the foundations of the Chinese catering trade were established with restaurants in London's West End, open to a British clientele. Unlike the laundry business, the restaurant trade survived the economic depression of the 1930's.

World War II increased the numbers of Chinese in Britain from 10,000 (Broady, 1952) to 20,000 (Jones, 1979). Chinese seamen mostly from Shanghai and Chekiang were recruited to man British merchant fleets from Liverpool. Many Chinese who intermarried during this period were allowed to stay on after the war in Liverpool although large numbers returned home or were repatriated (Broady, 1952). This increased the numbers of Chinese in Liverpool based predominately in the old Chinese community around Nelson Street where many capitalised on the increased demand for Chinese food in the catering business (Lynn, 1982). Thus, by the end of the 1940's and early 1950's, the successful economic adjustment of the Chinese was reflected in the development of a social class structure ranging from the laundry men, sailors and cooks residing in the older parts of the town to wealthy proprietors of lodging houses and restaurants many of whom married English women and lived in middle to upper class residential areas in Liverpool (Broady, 1952).

Similar changes occurred in London's Chinese community in the late 1940's to early 1950's. Areas around London's East End where the Chinese population lived were badly blitzed during the war which meant buildings had to be demolished. This coincided with the migration of Chinese to the Gerrard Street area of Soho in Westminster. Until this time, which effectively marked the end of the first phase of immigration and settlement, the numbers of Chinese immigrants remained small and only major port areas had Chinese communities.

Apart from the seamen there was a smaller group of Chinese who arrived during the early years of this century. They were students from China who wanted a western education. A 1931 agreement between the Chinese and British government provided greater training opportunities for Chinese students in British industry and their numbers

increased during the following decade. Students also arrived from Malaya and Hong Kong (Ng, 1968).

1.1.2 Post-World War II Arrivals: The Second Phase

Watson (1977) claims that the second phase of Chinese immigration to the UK after 1947 was mostly the result of an adaptive response to increased economic competition in agriculture in Hong Kong which coincided with the influx of refugees from Mainland China. For example, villagers from San Tin (an area in the rural New Territories of Hong Kong) were traditionally small scale rice farmers unlike other New Territories villagers with more fertile land. As rice farming became more unprofitable, they were not able to take advantage of the new market gardening opportunities opening up in the 1960's, because the brackish waters of their paddy fields rendered them unsuitable for conversion into vegetable plots. For the same reason they were unable to rent out their land for cultivation by the refugees from China. Many of these villagers were unwilling to work in urban Hong Kong, being qualified for only menial and low-paid industrial jobs and left Hong Kong to seek employment in Europe. They were able to exploit the opportunities which were opening up in the UK in the catering business at that same time.

Ng (1968) attributes the post war popularity of Chinese food to several factors: the end of rationing and proliferation of restaurants; that a Chinese meal was more substantial and good value for money; a change in the eating habits of the English with more people eating out; and that service personnel who had acquired a taste for Chinese food whilst stationed in the Far East during the war began to frequent Chinese restaurants.

After World War II and the Civil war in China (1946-1949), a number of Chinese professionals and political refugees also came to Britain (Tsow, 1977).

Chann (1976) has suggested that the pattern of post war immigration of Chinese from Hong Kong can be divided into several stages. This coincided with the gradual tightening of immigration controls and the economic development of the Chinese community in the UK. Chinese born in Hong Kong were British subjects and held British passports; those from Hong Kong but originally born in Mainland China or whose births were not registered, travelled on a Certificate of Identity. In the 1950's to 1960's, both groups were able to come to the UK relatively freely and were assisted through kinship or village links with men from the first migration who were already in Britain

usually operating as restaurateurs. Kinship became increasingly important as immigration restrictions were tightened. It was young single males who came to the UK in this period. Their original intention was to be successful in their endeavours, save as much money as they could and bring back to their homeland the wealth they had accumulated on retirement to their "remittance" or "Sterling houses" (Sterling earned in Britain was sent back home at regular intervals, often invested in the building of retirement homes). Only a small minority brought their wives and families upon settlement or married girls already here. With the introduction in 1962 of the 1st Commonwealth Immigration Act, it became more difficult for Hong Kong born Chinese to enter Britain and immigration was controlled by the Work Voucher System with admission mainly under Category A, where the migrant had to have a specific job to come to in the UK. The Category A voucher required the employer to apply, which meant that the intending migrant required sponsorship by either a friend or relative already in Britain who was in a position to offer a job. This practice restricted immigration to certain Hong Kong villages from which earlier settlers came. In 1965, a ceiling of 300 Category A Vouchers per year was established for Hong kong born Chinese, but this still did not satisfy the need for Chinese labour by the expanding catering trade. As a result, many restaurateurs drew upon a new pool of Chinese labour in Hong Kong which consisted of Chinese born in Mainland China who were classed as "stateless aliens" and who were thus not subject to the restrictions of Commonwealth immigration.

1.1.3 Post-World War II Arrivals: The Third Phase

According to Chann (1976), in the late 1960's, more men began to send for their wives and children to join them, but it was still more common to send for grown up children to help in the business, leaving wives to look after younger children in Hong Kong. However, the 2nd Commonwealth Immigration Act (1968) which limited the right of entry to those British passport holders, whose fathers or grandfathers (patrials) had been born in the UK forced many males to send for their dependants i.e. wives and children before the increasingly restrictive immigration made it difficult to bring in children as workers unless the wife was already in Britain. Previously, male immigrants were used to living in dormitory-style accommodation which was provided by their employers but the arrival of their families made other accommodation necessary. Economic and social factors as well as changes in British eating habits were conducive

to the emergence of Chinese takeaway shops. For a relatively small capital outlay, these provided independent living accommodation and employment.

After the 1971 Immigration Act, both Hong Kong and China born immigrants were admitted in restricted numbers on work permits.

1.2 Demographic Characteristics

Two sources of information on the Chinese in the UK are available, the Census and the Labour Force Survey. Although country of birth is recorded in the 1981 Census, it contains no question relating to ethnic origin. As a result, figures on the country of birth - China or the Far East New Commonwealth (Hong Kong, Malaysia, Singapore), are rendered irrelevant by the inclusion of many who are not ethnic Chinese and as many as 57% may be children of white British Personnel born in Hong Kong, Singapore or Malaysia. In addition, the children of Chinese ethnic origin born in Great Britain are excluded.

Table 1.1 Country of Birth (China and Far East Commonwealth) of Residents in Great Britain 1951-1981

Year	China	Hong Kong	Malaysia	Singapore	Total
1951	1,763	3,459	4,046	3,255*	12,523
1961	9,192	10,222	9,516	9,820	38,750
1971	13,495	29,520	25,680	27,335	96,030
1981	17,569	58,917	45,430	32,447	154,363
(Census, 1951,1961,1971,1981, O.P.C.S.; Taylor, 1989) * Estimated figure					

The following table indicates the growth of the China and Hong Kong born population in Greater London, the main centre of Chinese settlement for over 30 years.

Table 1.2 Residents of Greater London Born in China and Hong Kong (1951-1981)

Year	Country		
	China	Hong Kong	Total
1951	1,350	586	1,936
1961	2,981	2,834	5,815
1971	3,815	6,865	10,680
1981	4,965	14,536	19,501
Source: Census, 1951, 1961, 1971, 1981; Taylor, 1989			

The second source of population data is The Labour Force Survey (LFS). While this is based on a smaller sample, it does include in addition to information on country of birth, details of ethnic origin, nationality, parent's country of birth and year of entry in the UK.

Since the LFS is based on a smaller sample caution has to be taken when comparing results from different years since apparent differences may be due to sampling error and response rates rather than real changes in the population.

With these limitations in mind, LFS (1987) reported an estimated population of 126,000 persons of Chinese ethnic origin in the UK, although the true figure may be much higher (Roper, 1987).

Watson (1977) has estimated that approximately 70% of the Chinese in Britain are from the New Territories in Hong Kong, the remainder are mostly from Taiwan, Singapore and Mainland China. There are a few Tan Ka/Hokklo (Hong Kong's boat people) in the UK.

Information about the distribution of the Chinese in Britain is not accurate. The following table illustrates the regional distribution of the population of Chinese origin from the LFS (1983).

Table 1.3 Distribution of Population of Chinese Ethnic Origin 1983 in Britain (Percentage)

Region	Sub total (%)	Total (%)
Yorkshire & Humberside		2
South Yorkshire	0	
Metropolitan Co.	0	
West Yorkshire	0	
Metropolitan Co.	1	
Remainder	1	
East Midlands	7	7
South East		51
Outer Metropolitan	8	
Greater London		
Inner London	16	
Outer London	17	
Remainder	10	
West Midlands		7
Metropolitan County	5	
Remainder	2	
North West		10
Greater Manchester Metropolitan Co.		
Remainder	2	
Rest of Britain		23
ALL REGIONS		100

Source: Labour Force Survey 1983

Not surprisingly, different sources give different estimates of the local Chinese population, for example, estimates for the south west region range from 2,000 to 10,000 and for Tower Hamlets, 1,500-5,000 (House of Commons Home Affairs Committee, 1985).

Despite the existence of "chinatowns" in certain areas, the main feature of the Chinese settlement is that it is scattered. This has resulted from the need to avoid competing with too many Chinese and other ethnic minority run catering establishments (particularly takeaways) in one place.

Chann (1976) has suggested that Hong Kong immigrants from the more rural New Territories have settled in the provinces whereas those of urban origin, or those born in

China have tended to settle in the Greater London area and are in a minority in the provinces and Scotland. Simsova and Chin (1982) however, claimed that a higher proportion of China born Chinese have settled outside London. Whatever the case, London appears to have the highest concentration of Hong Kong Chinese (approx 40%) with over 40,000 distributed throughout the 28 metropolitan boroughs, the other main concentrations appear to be in Manchester (which now contains the second largest Chinese community in Britain), Liverpool, Glasgow, Edinburgh and Cardiff.

1.3 Age Structure

Table 1.4 illustrates that the Chinese population is at present predominately young; only about 5% are aged 60 or over and only 11% are between 45 and 59 (Hasley, 1990).

Table 1.4 Average Population by Chinese Ethnic Origin and Age (1984-1986)

Age	% in Age Group
Under 1	1
1-4	7
5-9	10
10-14	10
15-19	8
20-24	9
25-34	23
35-44	18
45-59	9
60+	5
ALL AGES	100

Source: Adapted from Hasley, J (1990)

1.4 Family Structure and Size

Traditionally, the Chinese family was based on Confucian philosophy and the concepts of filial piety, authority, obedience and respect. The most important concept of filial piety served to link the individual to his ancestors by obedience and respect for his parents. There was a family-son relationship, the son was expected to obey, serve, show respect and always defer to his father. The father-son relationship was the model for all family relationships: elder brother-younger brother, seniors-juniors of the same generation, husband-wife and all male-female relationships (Baker and Honey, 1981). Such attitudes and relationships made the family a self contained social entity, regulating its internal affairs and decision making and providing the orientation for the individual's loyalty and sentiments. The senior-junior relationships continued to hold even when broken by death, as filial respect and service through ritual sacrifice and ancestor worship were still demanded. Traditionally, in the New territories, families lived together as an extended group, often three or more families forming one household. Maintenance of a large family was seen as an indication of prosperity whereas division of the household was a misfortune (O'Neill, 1972). The system of patrilineal descent excluded women from inheritance so it was customary for daughters to marry into families in other villages. Parents chose marriage partners for their sons. Within the traditional authority structure of the family, a daughter-in-law was subservient both to her husband and parents-in-law.

O'Neill (1972), from results of her research believes that in Britain no one family structure can be defined as a "typical Chinese family". Instead she suggests that a three fold typology exists ; the traditional, modern and the Anglicized Chinese family.

The traditional Chinese family characterised by family loyalty tended to be found among early settlers. Although some lived separately, there was still a strong father-son relationship. Marriages were semi-arranged to a Chinese spouse and wives only worked occasionally in the family business. Family meetings always took place at traditional festival times.

The modern Chinese family was seen as an adaptation to the traditional family structure which fitted in with the new living conditions. The family retained certain traditional features, as in the obligation of children to parents, but differed in the degree of attachment. There was no authority hierarchy within the family, the father-son relationship being replaced by the husband-wife relationship. In these families, there was

a sense of belonging to the residential unit which was usually nuclear, relatives were usually peripheral and friends more important.

The Anglicized Chinese family consisted of those who were born and brought up in Britain. This family emphasised the individuality of family members which differed in degree. There was a greater independence for children, especially in the freedom to choose marriage partners. Wives worked outside the home. There was no family hierarchy.

The average size of the Chinese household in Britain is large as a result of the extended family which may mean 3 or 4 generations living together. The 1981 LFS showed that 20% of households where the head is of Chinese ethnic origin contained 6 or more people compared with only 4% of all households. The mean household size where the head is of Chinese ethnic origin was estimated by the LFS (1981) to be 3.53 compared with 2.67 of all households.

Table 1.5 Household Size: Chinese Households and Others Compared (Percentages)

	Head of Household of Chinese Ethnic Origin %	All Households %
All households	100	100
1 Person	17	22
2 Persons	19	32
3 Persons	16	17
4 Persons	17	18
5 Persons	12	7
6 or more Persons	20	4

Source: Labour Force Survey, 1981

1.4.1 Position of The Elderly

The Chinese have a long and honourable tradition of caring for the elderly within the family and probably most will continue to do so, but not all elderly Chinese will be looked after in this way. Some such as former seamen in Liverpool, have no children

and are isolated from the rest of the Chinese community. In other cases, families are unable to look after their old because of financial problems or inadequate housing, which may mean that the old person formerly in tied accommodation is living in local authority housing remote from his children still in the city centre (House of Commons Home Affairs Committee, 1985).

Conflicting views exist about the extent to which the elderly Chinese are being supported by their families in the UK. Lynn (1982) reported that 26% of 141 Chinese families interviewed in Liverpool in 1979 had one or both of their retired parents living with them ; a finding supported by Tsow (1979) who believes that older people are largely respected and cared for by their families. O'Neill (1972) however, found that in some cases, respect and obedience had been undermined by the migration process, so that when elderly parents were reunited with their families, traditional family concepts such as filial piety and the superior-inferior relationships were no longer accepted. Simsova and Chin (1982) reported conflicts between grandmothers and mothers because of expected obedience and adherence to social customs. It has been reported that the elderly sometimes become rejected, lonely and isolated as a result of family conflicts (Quaker Community Relations Committee, 1981).

Uptake of existing services by the Chinese elderly is virtually nil (House of Commons Home Affairs Committee, 1985). Perhaps this is not surprising since they speak only Chinese. In the case of homes for the elderly, they are likely to be unhappy and isolated in an environment where no-one understands the Chinese language, culture or customs and where only western food is available. As Lim (1984) says, "To advocate or to suggest to the elderly to go to the Day Centre or to the Old People's home is like sending them to the moon".

The area of need most frequently cited by the Chinese is care of the elderly (Home Affairs House of Commons Report, 1985). Although the numbers are small at present, the number of Chinese elderly can be expected to increase, even if some return to Hong Kong on retirement. It is also likely that an increasing number of early immigrants and elderly relatives who have recently migrated to this country will come into contact with the NHS more frequently. It is probable that they will present with the same degenerative diseases (which may require dietary advice) as the indigenous population. With their different cultural and dietary beliefs and language difficulties, it is important to understand any nutritional needs which this section of the population may present in the future.

1.5 Language

The written Chinese language is a system of characters which is the unifying link between the diverse groups of Chinese. However, a number of dialects are spoken. The main ones are Cantonese (the dialect of urban Hong Kong and Kwantung province in China); Hakka (a dialect of the rural New Territories in Hong Kong); Mandarin (the official language of China) and Hokkien the principal dialect of Malay Chinese (Taylor, 1989).

Although it is not known how many Chinese dialects are spoken in the UK (Taylor, 1989), it is generally thought that Cantonese speakers predominate, with smaller groups of Hakka, Mandarin, Hokkien and Vietnamese speakers. Campbell-Platt (1978) estimated that Cantonese and Hakka speakers ranked as the 11th and 12th largest groups of overseas language speakers in the UK.

Table 1.6 Chinese Languages Spoken by Respondents in a Survey of Library Needs

Birthplace	% Speaking				
	N	Cantonese	Hokkien	Mandarin	Hakka
Hong Kong	209	99	4	35	24
China	31	64	10	77	15
Singapore	41	64	62	88	32
Malaysia	188	71		59	32
Taiwan	8	56		78	12

Source: Simsova and Chin, 1982

It is likely that some adults of Chinese ethnic origin speak more than one dialect as shown by the Linguistics Minorities Project (1983) which included an Adult Language Survey.

Table 1.7 Extent of Multilingualism Amongst Cantonese Speakers

Cantonese Speakers	% Speaking Other Chinese Languages			
	N	Mandarin	Hakka	Vietnamese
Bradford	50	15	13	97
Coventry	43	14	83	--
London	137	17	16	14

Source: Linguistics Minorities Project, 1983

The Adult Language Survey also gave information on the percentage of Cantonese speakers who reported that they understood and spoke Cantonese either fairly or very well and read and wrote Chinese either fairly or very well.

Table 1.8 Chinese Adult's Competence in Cantonese

Cantonese speakers	N	Understand + Speak (%)	Read + Write (%)
Bradford	50	88	28
Coventry	43	79	51
London	137	96	65

Source: Linguistics Minorities Project, 1983

Evidence submitted to the House of Commons Home Affairs Report Committee (1985) suggested that most Chinese over 45 have some knowledge of the written word but a sizeable minority (20%) especially women are illiterate in Chinese.

1.6 Knowledge of English

There are considerable differences in the knowledge of English language in the main groups of Chinese adults in the UK - catering workers students and professionals. The former generally have had little formal education let alone English tuition in their country of origin whereas students and professionals will have had higher education and a considerable knowledge of English before arrival in the UK.

Ng (1968) found that a great majority of Chinese restaurant workers were ignorant of English. Watson (1977) suggested that most waiters learnt only enough English to handle orders and that less than 20% could hold a simple conversation with a customer.

Knowledge of English depends also on the age of arrival in the UK, the elderly often speaking no English at all. Unofficial estimates of the proportion of first generation Chinese unable to speak English range from 65-75% (House of Commons Homes Affairs Committee Report, 1985). As for younger Chinese, the Inner London Education Authority (ILEA) in 1984 estimated that only 52% of Chinese pupils in its secondary schools are fluent in English.

Many reasons have been put forward as to why many Chinese immigrants, despite long residence for some, are unable to understand the English language. These include nature of work; isolation in a Chinese speaking environment; lack of time; large differences between the English and Chinese language and lack of provision of English as a second language (ESL) classes.

1.7 Employment

As with other ethnic minority groups there is little evidence of the Chinese immigrants working in industry or in the public services. The proportion engaged as professionals e.g. accountants, doctors, business executives, architects and solicitors is estimated to be about 2% but appears to be growing (House of Commons Home Affairs Committee Report, 1985). This has been attributed in part to lack of spoken English. In addition, since the kinship links used to facilitate migration necessitated involvement of the second phase of immigrants in the catering trade, this probably played an important role (Ng, 1968).

Since the second phase of Chinese male immigration, employment has mainly been in catering. Estimates of the proportion involved are generally about 90% (Taylor, 1989). However, because of the growth of service industries like importing and wholesaling to serve the needs of the Chinese catering trade, others would put the percentage engaged in catering lower (House of Commons Home Affairs Committee Report, 1985). About 60% of catering families run takeaways now including fish and chip shops rather than restaurants (House of Commons Home Affairs Committee Report, 1985).

1.7.1 Working Conditions

As well as offering a wider variety of food than their competitors, Watson (1977) believes that the success of the Chinese in catering has been largely due to their willingness to work longer hours. Working hours in catering (average 10 hours per day) range from 11.00am-1.00am for a waiter with an average of 3 hours off (2-5pm) in the afternoon (House of Commons Home Affairs Report Committee, 1985). The number of working days varies; a waiter would be permitted a maximum of one day off per week and a self-employed worker in a takeaway would be likely to work 7 days a week. Annual leave is often commuted for cash. The income of men involved in the catering trade appears to be greater than the national average (Tan, 1982).

1.7.2 Family Members at Work

A proportion of women are also employed in addition to their jobs as housewives. Most often, this is in association with the family takeaway, fish and chip shops or other jobs linked to the husbands activity. In contrast to some other ethnic minorities, there is no traditional restriction against employment of women amongst the Chinese. Indeed in the rural New Territories, many Hakka women work as farmers during the day bringing their children with them and cook and clean in the evenings whilst their husbands socialise and play Mah Jong during most of the day (Sham, 1990).

Traditionally, child labour or employment of young adolescents in Hong Kong has been important especially among farming and fishing communities. In the UK, Jackson and Garvey (1974) described the involvement of some Chinese children (from a very young age) in their parents' takeaway until late at night. This resulted in late attendances at school; tiredness; lack of time for homework and study; curtailment of further education to support business commitments and even lack of registration for schooling. The researchers claimed that the Chinese children interviewed worked an average of three-and-a-half hours each evening often on a shift basis with other siblings.

1.7.3 Unemployment

The ability of the Chinese catering trade until recently to absorb almost all available Chinese labour has meant a low rate of unemployment among the Chinese. However, unemployment may represent a greater problem than was previously apparent. Particularly, for the group of over 50's catering workers who have worked long hours in ill-ventilated kitchens, loss of health often leads to dismissal. This not only means

losing their livelihood but also their tied accommodation. Having no other skills or a sufficient command of the English language, finding alternative employment may be virtually impossible.

1.8 Recreation

Single Chinese restaurant workers and those with families appear to have different social activities (Taylor, 1989). Single men appear to spend most of their afternoons off chatting or playing Mah Jong whilst those with families are more likely to spend their breaks at home doing chores and having a rest.

Other recreational activities include reading Chinese newspapers, gambling in casinos, visiting cinemas showing Chinese films (Garvey and Jackson, 1975; Simsova and Chin, 1982) and watching Chinese videos at home all of which require no knowledge of English.

Family outings are extremely rare (Fong, 1981) since some parents work throughout the week whilst others have holidays on weekdays when their children are at school. Special treats for Chinese families usually involve trips to Soho in London especially at festival times and revolve around eating.

Chinese children appear to have largely home based domestic interests (Fong, 1981) which include helping parents with housework or in the shop, reading, writing, watching television, music and playing sports.

1.9 Health

1.9.1 Health Problems

Some common health problems exist in the Chinese population in Britain especially amongst restaurant workers (Li, 1979; House of Commons Home Affairs Report, 1985), the most prominent being gastric ulcer problems. Exacerbating factors include working long hours in hot, ill ventilated kitchens, heavy smoking and drinking, especially the stronger type of alcohol such as brandy and Chinese Sern Ching (double distillation) wine.

Bronchitis and respiratory tract infection are also common health problems caused by smoking and poor working conditions when found in adults. Amongst children, the problems are mainly due to overcrowding since many families have five or six children living in one small house or sharing a flat with another family.

Nasopharyngeal carcinoma, a disease peculiar to the Chinese but rare among Europeans, has been described amongst Chinese immigrants living in the UK (Lynn, 1982). In the north west region, about 15 cases in one year of this uncommon form of cancer were reported to the Cancer Registry based at the Christie Hospital and Holt Radium Institute (North Manchester Health Authority, 1984).

There is a high . incidence of Glucose-6-phosphate dehydrogenase (G-6-P-D) deficiency among Chinese people (Chan, 1984; Black, 1985). This inherited enzyme disorder occurs in 5% of male Chinese babies who are at risk of brain damage often from severe jaundice (neonatal hyperbilirubinaemia) and massive destruction of red blood cells in the first few weeks of life. Since the liver is unable to cope with the load of bilirubin, an exchange transfusion of blood is occasionally required. Also, G-6-P-D deficiency renders affected individuals susceptible to certain drugs like aspirins, certain antibiotics and fava beans which may lead to haemolytic anaemia. This represents a severe risk to health if the condition is not diagnosed and the appropriate treatment administered.

Hepatitis B virus is about 10% in China compared with 0. 1-0. 5% in northwest Europe. It is thought however, that the prevalence is lower in subsequent generations of Chinese born in the UK (Chan, 1984). Transmission of the virus from infective carrier mothers to their newborn babies is thought to be most common among the Chinese particularly if the mother carries Antigen E. It seldom causes any apparent harm during early life but it has been found to be associated with primary liver cancer in later years.

Anaemia may also occur during pregnancy (unresponsive to iron therapy) which may be due to beta thalassaemia trait, alpha thalassaemia (haemoglobin H) or some other haemoglobinopathy (haemoglobin E).

Neurosis and psychosis have been described among youngsters. A few cases of schizophrenia has been referred to psychiatric hospitals (House of Commons Home Affairs Committee, 1985).

The constant stress of life in an alien environment is thought to contribute to a high level of psychosomatic illness among Chinese adults, especially women. Hong Kong's mild climate does not prepare them for the cold dreary English winters (Watson, 1977). This coupled with the widespread inability to communicate in English and lack of friends, leads to social isolation. Also, because husbands spend most of their time at work, little time and attention are spent on their wives. In addition, the work load of the

household and the stress and strain of looking after their children aggravate their state of emotional deprivation and also increases their frustration.

Little information has been gathered on the health problems afflicting the elderly. Health problems which have been quoted by Chan (1984) however, include rheumatism, poor eyesight, deafness, coughing, difficulty with walking, breast cancer, sensitive skins and general weakness.

1.9.2 Health Care

Chinese views are very different from the Western idea of health care. In Hong Kong, the Chinese have access to both traditional Chinese and Western medical care. On migration, Chinese inevitably experience differences with respect to health care.

Medical treatment is a problem that appears to worry a lot of Chinese families in this country (House of Commons Home Affairs Committee, 1985). Using the National Health Service (NHS) presents particular problems for the Chinese, not least because of the need to communicate in English. As a result, they may defer seeking treatment. The House of Commons Home Affairs Committee (1985) commented that the Chinese made less than average use of the NHS but that demand increased as soon as Chinese intermediaries were available. In the absence of interpreters, catering families in particular try to use Chinese doctors who practise with the NHS (Watson, 1977). Financially possible, some will even fly back to Hong Kong for advice. Families also regularly make use of Chinese herbal remedies (Garvey and Jackson; 1975).

One major obstacle to seeking medical care appears to be the lack of time for restaurant workers to make an appointment to see a doctor when ill. This is especially true for those working in takeaway shops so that treatment is often delayed. The strong cultural tradition of self-help may also lead to a reluctance in the Chinese to seek health care, preferring instead to make use of traditional food or herbal remedies or acupuncture treatment. Besides, those who live outside London have to travel a long way to see a Chinese doctor (of which there are only 3 practising around the Soho area and Covent Garden). Many Chinese especially women cannot travel because of the language barrier. It is not uncommon to find those that do travel carrying a piece of paper with their destination written in English to show other travellers in case they get lost.

The general lack of knowledge among Chinese women concerning family planning and contraception results in stress. Often Chinese women do not understand how to use contraceptives which consequently results in a demand for abortions and a fear of

infertility (Lynn, 1982). Other culturally derived problems which have been mentioned by Chan (1984) and the Newcastle Health Authority (1984), indicate a certain degree of reticence on the part of women giving histories or undergoing examinations especially when dealing with male doctors; difficulty in communication due to language problems is coupled with a very different and deep rooted concept of health and disease based on traditional upbringing. This may result in problems when describing symptoms to a non-Chinese speaking doctor; resistance to regular antenatal and postnatal care e. g. the practice of 'doing the month' (during the month after parturition, the new mother has to stay indoors for various health reasons- see later) confines the mother to the home; and conflicts arising between Western treatments and traditional Chinese remedies such as herbal preparations and acupuncture.

Many dislike the idea of going into hospital since they feel isolated due to both language and cultural differences and the fact that they "hate the food" (Lynn, 1982). The increasing immigration of Hong Kong trained nurses however, has made it easier for elderly patients who have to go into hospitals. At one time, hospital trips were terrifying for such migrants whose only experience with such institutions had been extremely negative (villagers traditionally associate hospitals with death houses). Lynn (1982) and the Chinese Action Group and Quaker Community Relations Committee (1979) have pointed to the disadvantage suffered by the Chinese in terms of access to health care, preventive health measures, diagnosis, treatment and rehabilitation. In Liverpool (Lynn, 1982), many Chinese families rely on self administered forms of Chinese medicine rather than seeking professional help, particularly as there is no Chinese General Practitioner despite the long established nature of the Chinese community. In attempting to communicate with a non-Chinese speaking doctor there are obvious difficulties in explaining symptoms, understanding what the doctor requires and interpreting medication. Even when interpreters (relatives, friends, or children even) accompany Chinese to hospitals, they may not be in a position to make medical explanations or to allay fears and suspicions.

1.10 The Future

By the early 1970's, changes with regard to the orientation of migrants were occurring (Watson, 1977); though remittances were still being sent home.

The ambivalence of planning for the long term and future orientation appears to have remained. More recent research has shown that new arrivals were more eager to

return home because they experienced difficulties in adjustment, missed their friends, family at home and their lifestyles in Hong Kong (Fong, 1981). However, pupils of Chinese origin educated in this country appear to be less likely to return to Hong Kong since they probably could not be culturally or linguistically assimilated with their contemporaries back in Hong Kong (Ng, 1982).

Barker and Honey (1981) have suggested that "going home" no longer has the same deep meaning for the Chinese but nevertheless they still retain a sentimental attachment to their strong cultural roots. This has been shown by the recent emergence of community projects initiated by existing Chinese community centres and Chinese action groups through the development of Chinese language and culture classes for the second and subsequent generations.

The primary problem that the majority of Chinese in this country must face is the future of Hong Kong itself. The 99 year lease expires in 1997 when the New Territories reverts back to China. The desire for going back home for most Chinese in Britain may have been dampened by the recent developments in China. Since then, the British Government has promised 25,000 Hong Kong families the right of abode in the UK, whether this allocated number take this opportunity up remains to be seen. Certainly, if they do come, the profiles of these migrants will be quite different from earlier emigrants. Assimilation into the host society will probably be much easier for these newcomers since they are likely to be more educated and know more English. They probably will not have much in common with the existing Chinese community. It is not certain whether these newcomers will bring their elderly parents with them to settle, so the age profile of the community will probably remain young. Whatever happens, it is certain that tradition will continue to influence the eating habits and dietary beliefs of the Chinese community in Britain for some time to come. The next chapter will look at this in detail.

CHAPTER 2

CHINESE CUISINE, MIGRATION AND CHANGING FOOD HABITS

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CHAPTER 2

CHINESE CUISINE, MIGRATION AND CHANGING FOOD HABITS

Introduction

Food holds a prominent position in Chinese culture. Since antiquity, food has been used to mark calendric and family events as well as social transactions. No major religious event is correctly performed without offering up special foods in the ritual context.

Recognising this social importance of food, this chapter will firstly describe the "hallmarks" of traditional Chinese cuisine followed by an outline of the pattern of dietary change as Chinese have migrated to different areas of the world.

Various schema have been proposed for the classification and characterisation of national food systems and cuisine. Whilst Rozin (1973) has identified flavours as markers of cuisine, Anderson and Anderson (1972) have considered that Chinese food is characterised by cooking methods. Chang (1977) however, considers that the food-style of the Chinese can be characterised by an assemblage of the following variables:-

1. Plants and animals
2. Preparation and cooking of foods
3. Utensils and kitchenware
4. Ideas and beliefs about food

The following gives an account of some of these food variables. Looking at the general meal pattern first, in southern China, as in much of south east Asia, the phrase "chih fan" (literally means to "eat rice") but is almost equivalent to eating a meal. A meal without rice is not considered a meal at all.

An ordinary meal is made up of "fan" and "sung" - the latter being the Cantonese translation of "things to accompany the rice". Sung includes everything else except fan (i.e. meat, vegetables etc) all combined into individual dishes, each dish is referred to as "tsai".

2.1 Plants and Animals

2.1.1 Staples

Rice is usually the most highly regarded grain, often regarded as the life-sustaining food. The different varieties of rice are assigned different social roles; whilst *Oryza indica* is the staple, glutinous rice is usually only used for confections, but is obligatory for certain ceremonies. In addition to its use as a whole grain (boiled), rice is made into flour, noodles, cakes and many fermented products (most vinegar have a rice base). Rice is also used for sweets as well as cosmetics.

Wheat, the second most important grain in China is primarily grown in the north, central and west of the country. Steamed wheat flour dumplings are the standard food of much of northern China. Wheat flour is also used to make noodles and bread. Oven baked bread and similar goods have been increasing rapidly in consumption especially in Hong Kong and other westernised Chinese communities. Wheat gluten (separated from starch) is widely used to make imitation meats in vegetarian cookery.

The third most important grain in China is maize. Corn is used for noodles, sometimes it is cracked and mixed with rice or made into corn meal cakes. It also has a role to play in the production of alcohol.

2.1.2 Pulses, Legumes and Nuts

Most widely used is soybean (*Glycine max*) often made into beancurd. However, the main use of soybeans is in the production of fermented products like soy sauce.

Mung beans (*Vigna mungo* var.*radiata*) are boiled and made into curd; its starch is important in making thin transparent noodles known as beanstarch
or peastarch. However, it is most often eaten as sprouts, for which it is the bean of choice, since soybean sprouts are very much coarser in texture.

Peanut (*Arachic hypogaea*) oil is the most important cooking oil in China (rapeseed oil is important in the north of China). The peanut itself is eaten boiled, roasted or raw, whilst the ground or broken nuts are used in pastries, candy and sweets. A mixture of ground nuts and sugar is commonly used as a filling for sweets and may form the basis of a sweet dessert soup.

The red beans, adzuki (*Vigna angularis*), kidney (*Phaseolus vulgaris*) and rice (*Vigna calcarata*) are also boiled and constitute sweet soups.

Several species of beans are used as fresh green beans like the yard long bean (*V.unguiculata* var.*sinensis*) which resembles string beans but are much longer. They are

cut into sections and stir fried with meat or other vegetables. Other greens much less frequently used include sword bean (*Canavalia ensiformis*) and dolichos bean (*Dolichos lablab*). Yam bean (*Pachyrrizus erosus*) which resembles a large flattened turnip is used as a root plant, which is sliced and eaten raw dipped into chili sauce.

Nuts play a minor role in Chinese cuisine. In addition to walnuts, (*Juglans regia*), chestnuts (*Castanea mollissime*), hazelnuts (*Corylus*), pine nuts (*Pinus koraiensis*) and ginkgo nuts are used.

2.1.3 Vegetables and Fruits

Cabbages are the most universally and widely used. The main forms are *Brassica pekinensis* (known as Chinese cabbage or Peking cabbage), *B.chinensis* (paak choi) and *B. parachinensis* (mustard greens). Other brassicas are also eaten especially varieties of *B.juncea* and *B.alboglobra* which are Chinese counterparts of kale and collards. Both are particularly used in soups.

Spinach (*Spinacia oleracea*) is utilised primarily in clear soups with strips of meat, beancurd or other protein sources. More popular than spinach in the warm parts of China is amaranth/red spinach (*Amaranthus gangeticus*). Lettuce (*Lactuca sativa*) is usually eaten in soup but rarely eaten raw in a salad (unknown in traditional China).

Watercress (*Rorippa nasturtium aquaticum*) is employed commonly in soup (often combined with fresh and internal organs like duck and gizzards) but never eaten raw. Other frequently used soup vegetables include the matrimony vine/Chinese wolfthorn (*Lycium chinensis*) and the garland chrysanthemum (*Chrysanthemum coronarium*).

The most important non leaf vegetables are the root crops which include white radish (*Raphanus sativus*) normally sliced, dried and pickled. A number of other tubers are eaten occasionally as well as bulbs and corms like water chestnut (*Elsocharis dulcis/Scirpus tuberosus*). The shoots of many plants are also eaten e.g. bamboo shoots.

Spring onion (*Allium fistulosum*) is widely used as a garnish/minor ingredient, but often especially in the north of China it is the main vegetable of a meat-vegetable dish like mutton/organ meat. Garlic (*A.sativum*) is utilised in stir fried dishes as well as dumpling fillings.

Many seaweeds are eaten especially the flat seaweed used in soup and Buddhist vegetarian cookery. Shitake mushrooms and straw mushrooms (*Volvarielle volvacea*) are

common. Bracket fungi (ears) usually dried are popular in mixed dishes, common ones are wood ears (*Auricularia* spp) and cloud ears (*Tremelle* spp).

Solanaceous fruits which are commonly eaten include eggplant (*Solanum melongene*), tomato and chili pepper.

The largest class of fruits used as vegetables including many which are eaten as sweets is that of the melons (*Cucurbits pepos*). These are large fruits with a rind surrounding a central cavity of flat seeds attached by a pith e. g. squash, pumpkin and cucumber. Widely utilised in cooking is *Benincasa hispida* or the wax/hair gourd. It is eaten in 2 very different forms derived from different varieties of the plant, the winter melon and hair gourd. The former resembles a large watermelon, its slightly watery flesh is used in soup, often it is steamed in a metal pot with the soup inside the melon. The hair gourd is eaten small and unripe (resembles a pale courgette). In addition to these 2 varieties, there is a vast range of minor gourds which are eaten and include bitter melon/bitter gourd (*Momordica charantia*), cucumber/yellow melon (*Cucurius sativus*) and watermelon. Some varieties of melon are grown only for their large seeds.

Fruit is usually eaten green/salted and pickled. Most widely used is *Prunus mume* translated as plum but it is rather closer to an apricot. Other *Rosaceous* fruits eaten include peach (*P.persica*), apricot (*P.armeniaca*), apple (*Pyrus malus*), Chinese pears (*Pyrus sinesis*), Chinese cherry (*P. pseudocerasus*), hawthorns (*Crataegus* spp) - grown for candied fruit, loquat (*Eriobotrya japonica*), jujube/Chinese date (*Zizyphus jujuba* and *Z.sinensis*) and carambola/star fruit (*Averrhoa carambola*).

Citrus fruits are popular and includes orange (*Citrus sinensis*), mandarin orange and tangerine (*C.reticulata*), pomelo (*C.grandis*) and kumquat (*Fortunella* spp).

2.1.4.Herbs, Flavourings and Spices

Chinese food uses less herbal and spice flavouring than do most cuisines of Asia. Among spices, the most important is ginger (*Zingiber officinale*). Other distinctive Chinese spices include star anise (*Illicium* spp) followed by brown pepper (*Xanthoxylum piperitum*) and cassia (*Cinnamomum cassia*) bark and dried flowers. Coriander greens (*Coriandrum sativum*) and chives are widely used in Chinese cuisine. Amongst flavourings, the most common fermented product is soy sauce. Other ferments include yellow and red soybean pastes, black beans, pickled bean curd and curd cheese. These are made by soaking and cooking the soybeans then fermenting them with *Aspergillus*,

yeasts, *Rhizopus* spp. and bacteria. They differ in whether the beans are mashed or not, or mixed with other ingredients. Black beans are heavily salted and fermented with *Lactobacillus*.

2.1.5 Fats and Oils

Lard is sometimes used in Chinese cooking but vegetable oil is more common. The traditional source was rapeseed (*Brassica juncea*). Nowadays, peanuts have become more important in areas where they grow better than rapeseed.

2.1.6 Beverages

The most popular drinks are hot water and tea. Tea was not known in ancient China, the word then meant infusion of leaves. It was not until the T'ang dynasty (AD 618-967) that the name came to refer to the infusion of *Camellia sinensis*. Tea comes in 3 different forms - green, lightly fermented and black (red) tea.

Coffee and cocoa as beverages are drunk but not very commonly. Alcoholic beverages are usually called wines ('chiu') but are not made from fruit though. They may be served to commemorate a notable social occasion but are only served after the meal has begun.

2.1.7 Animal Products

The Chinese avoid very few animal products. Traditional aquatic foods include sea cucumber, shark's fins, shrimps, carp, groupers, pomfret, oysters and other bivalves.

Marine fish particularly those with a white, firm, delicately flavoured flesh is preferred. Softer flesh fish are used for making fishballs. Fish is usually steamed with the classic fish flavours - oil, garlic, green onions, ginger, wine, soy sauce, tangerine peel, tree fungus, coriander leaf.

Fresh lobsters, crabs and shrimps are regarded as delicacies. Shrimp are often boiled and eaten with soy sauce whilst crabs are also boiled but dipped into red vinegar before eating. Sea cucumbers (*Holothuria*) of many genera are sold dried and then stewed until they become gelatinous and chewy. They act like a sponge absorbing the flavours of other foods cooked with them (like sharks fins, bird's nest, beef sinews). Fish swimbladders (fish maws) are also popular as are dried fish roes.

The salting of fish gathered importance because of the lack of refrigeration in olden China (typical examples of salted fish are pomfret and croaker whilst shrimps can also be ground into a paste with salt added).

The main meat animals are pigs and chickens although sheep, dogs, cow, water buffalo, duck, rabbit, pigeon, guinea fowl are also eaten. Less common protein sources are snakes, frogs, cats, rats, mice, grasshoppers and horse.

Pig is the most popular meat, it is the daily meat for the rich and festive fare for the poor. Every part of the pig is used including the blood which is coagulated and fried. Sausages and hams are also made from parts of the pig. Poultry are festive fare and are traditional for all special occasions. Chickens are often boiled, rice is cooked in the stock, duck is also eaten boiled or dried. Their blood, tongues and brains are also utilised as protein sources.

Among minor animals are dogs which are eaten now only in the south of China primarily for winter warmth as is snake meat which is also considered as a medicinal food (the more poisonous the snake the higher its medicinal value).

2.1.8. Dairy Products

Little use is made of dairy products by the Chinese, milk is considered as a food only for babies. Only the nomadic peoples occupying China's west use yogurt, cheese, kumiss (fermented mares milk) and butter.

2.2 Regional Cuisine

Attempts to characterise Chinese cooking by region have been subject to debate. Classically, regions have been separated in terms of cities. Anderson (1989) however, suggests that regional cuisine is the separation of the north - the region of wheat and mixed grains -from the rice region in the centre and south. Mutton is the important meat in the north compared with chicken and pork in the south. The fruits and vegetables are different, the north being the land of peaches, jujubes, apricots, apples and turnips whilst the rice region uses citrus, lychees, bananas, taro, lotus. Southern fruits have always been northern luxuries, while the south imports soybeans from the north. Only the onion and cabbage-radish family cross both agricultural and culinary barriers to become important throughout the country.

Within this great division, there are many minor cuisines, which sort into 4 traditions (Hahn, 1968), with the north remaining as a single whole whilst the south is divided into 3 parts east, west and far south.

2.2.1 The North

The vast and heterogeneous realm of the north is united by several factors into a single region. Although in this area every province has its distinctive features. A major institution in Peking and elsewhere in the north is the Mongolian Barbecue. Meats of various kinds - mutton, beef, pork, game and whatever is available - are sliced extremely thin. The diners select these and add flavouring sauces to them e. g. soy sauce, wine, sesame oil, hot pepper oil, vinegar, slivered onions and ginger. The meat is taken to a conical brass grill on which it is tossed until cooked. Fresh hot shaoping (pockets of wheat flour bread like pitta) are used to make sandwiches with the cut meat. Spices are additionally provided at the table.

Peking is also famous for its 'small eats' (dimsum) as well as for its classic dishes e. g. wheat dumplings stuffed with either sweet or savory fillings are either boiled or shallow-fried without stirring (potsticker dumplings).

2.2.2 The Far South

Southern cooking means preeminently Cantonese cooking. To non Chinese, Cantonese food usually means chop suey (chap sui - 'a miscellaneous slop') and sweet and sour pork. Contrary to popular belief, chop suey is not a typical Cantonese dish rather it is a local Toisanese dish (Toisan is a rural district south of China). Basically it is leftovers and/ or odd vegetables stir-fried together with beansprouts nearly always present.

True Cantonese food contains little sugar and sweet and sour dishes are rare except for sweet and sour croaker (a seasonal fish). The use of fruit in meat dishes is typical of Cantonese cuisine. Much more characteristic of Cantonese cooking are stir-fried dishes often flavoured with black beans (salted, strongly fermented soybeans), seafood (fresh, dried or salted); the use of both seafood and meat in the same dish; preference for oil (particularly peanut) in cooking rather than lard; variety of fine cut vegetables. Common foods and dishes include cured meats (sausage, pork, duck); fried rice; fried noodles; steamed prawns with chili sauce to dip them in and steamed crabs in

vinegar; steamed mullet with slivers of ginger, spring onions and tangerine peel; fish with black beans and a variety of others.

The Cantonese are also famous for their 'small eats' (dimsum) and simple snack foods. Drinking tea ('yum char') traditionally involves the consumption of these snacks. Typical dim sum dishes are 'har gow' (based on minced shrimp, bamboo shoots wrapped in a thin dough skin and steamed); 'siu my' (meat filling with prawns wrapped in wonton skin and steamed); taro horns (chopped mixed meat covered with mashed taro, rolled into a hornlike shape and fried); char siu pao (fluffy steamed bread with a roast pork filling); steamed beef balls pungently flavoured with soy sauce; cheung fun (chopped fillings wrapped in rice flour dough); duck webs; chicken feet; lor my ki (glutinous rice dumplings stuffed with chicken, mushrooms, Chinese sausage wrapped in lotus leaves and steamed; wonton soup; noodles.

Included in this region is Hakka cuisine. For this style of cooking, every part of the animal is used e.g. spinal nerve cord of a calf delicately stir-fried with seasonal vegetables. Another characteristic Hakka dish is salt baked chicken. Also many vegetables including peppers, aubergine, bitter melon and tofu are stuffed with a minced mixture of fish, dried shrimps, pork, spring onions and fresh ginger. These stuffed vegetables are usually fried, baked or steamed.

2.2.3. The West

This includes cuisines of Szechwan-Hunan and Yunnan. Szechuan-Hunan cuisine is distinguished by the intensive use of fugara (brown pepper), chilies and garlic; and wide use of nuts and poultry. Especially characteristic dishes include hot and sour soup, camphor and tea smoked duck, beef with dried tangerine peels, and an oily walnut paste and sugar dessert. Yunnan cuisine is close to Szechwanese and possibly derived from it. Dairy produce like yogurt, fried milk curd and cheese are used extensively. Flavours are hot and spicy. There is an enormous use of pork in all forms, including the best hams, or cured and prepared pigheads in China. Mountain products such as game or fungi are also used.

2.2.4. The East

The region includes cuisines of the Lower Yangtze and Fukien. Aside from a great deal of oil in the dishes - usually vegetable - the main characteristic of the region of Lower Yangtze is that is diverse and varied. Dishes are usually cooked for longer

with more oil and features a variety of seawater and freshwater products. The cuisine also includes red cooked meats (stewed with soy sauce) and diverse cold appetizers. Included in the Fukien school of cuisine are villages (Teochui, Swatow in Kwantung Hainan, Hokkien) which speak the same language (Min). There is a great emphasis on soups; stews and rich meaty stocks and all sorts of congee (rice porridge). Fishballs, turtle meat, fungi and small clams are among the characteristic ingredients used for soup bases. Another trait is the use of pig's blood and poultry blood coagulated by the same method used to make tofu from soybeans. The pig's blood is usually cut into squares like tofu and stir-fried with spring onions. The poultry blood is sliced thin and served with various dip sauces, usually along with other parts of the bird; Teochui cuisine features steamed goose, goose liver, goose blood with garlic vinegar dip.

The Hainanese are famous throughout the south east Asian for chicken rice (this dish involves boiling chicken, preferably young ones raised by the family on a diet of sesame seeds using stock as soup base and also to boil the rice). The blood, intestines and all giblets are served with the chicken. Hokkien cooking uses lard for cooking other parts of beasts which are simmered in lard until tender.

2.3 Preparation and Cooking of Foods

Boiling is probably the most important cooking method in the Chinese kitchen primarily because most of the staple foods ('fan') eaten are boiled. Soups are also boiled and stews form an important part of the day's food.

Steaming is usually used for more delicate items like dimsum and aquatic foods - fish, crabs etc. This involves putting foods either on slatted wooden or bamboo trays over boiling water and covering the whole tightly. Sometimes steaming is done in a deep dish rather than on a tray, in which case the water may collect there as it recondenses providing a distilled broth for the food.

Roasting is done to produce char siu, siu yuk (roast pork with a crispy skin), soy chicken and roast duck. Baking has now become common as a western borrowing - cakes, tartlets and filled buns are baked. The main baked good of traditional northern China is shaoping. These are wheat flour and sesame seed buns that are baked by sticking them to the sides of a large pot or pot-shaped oven.

Cooking the same item by sequential methods is common. A food may be smoked (roasted over several items) then boiled and fried; or boiled and stir-fried or partly boiled set aside till needed then placed into the eaters hot soups to finish boiling

as it is eaten - e.g. Yunnanese 'across-the-bridge' rice noodles (the name refers to their being poured out of the cooking dish into the eaters bowl for final cooking).

Cooking in oil usually means stir-frying. The 'stirred' part consists of heating oil till it smokes, then tossing thin sliced vegetables and meat into it and stir-frying quickly for a few seconds while the food sears. Larger pieces like fish and egg are cooked longer with more oil and less stirring.

2.4 Meal Patterns and Structure

Cultural influences and environmental factors determine the foods to be eaten, the meal patterns, the number of meals a day as well as methods of cooking, eating and utensils.

Douglas and Nicod (1974) researching meal structures in Britain considered a meal as a situation in which food is eaten as part of a structured event i.e. organised according to rules prescribing time, place and sequence of actions, whereas a snack occurs when food is eaten as part of an unstructured event where there are no formal rules and each food item is self-contained. These researchers hypothesised that whilst only small reinforcing changes might be possible in the highly structured parts of food patterns, new foods and techniques could be introduced into less structured elements of the traditional diet.

Around a common core of shared food rules, regional differences in flavour and eating arrangements occur. Hong Kong serve as a typical example. Traditionally, a three meal system exists breakfast, lunch and dinner. Whereas Douglas and Nicod defined breakfast as a snack, this has been defined as a meal because of its consistency of consumption. Between meal snacks are frequent. Breakfast is usually a casual affair and can include noodles, congee, rice, pastries, dumplings, buns and puddings. The meal is often taken outside the home and bought from street vendors, markets, restaurants and tea houses. Commonly Chinese tea and boiled water are drunk. Lunch is also a casual affair eaten outside the home and consists of rice or noodles as staples and accompanied by one or two side dishes of t'sai. Dinner is considered the most important food event of the day and is eaten at home with the family. The meal is similar to lunch with rice as the staple accompanied by two or three side dishes of t'sai. Everyday t'sai include vegetable soup, steamed fish, vegetables, stir fried and pork dishes. If company is expected, chicken, pork, internal organs and larger more expensive fish would replace everyday dishes.

2.5 Migration and Changing Food Habits

Many factors interrelate which determine the details of human foodways and individual food habits. Firstly, human diets will depend on what the environment can provide and then from all the potentially available foods, selection is made for economic, cultural, religious and sociopsychological reasons. Individual factors come into play only after all the other conditions of acceptability have been met (Fieldhouse, 1986).

Changes in the physical as well as the social environment of individuals or groups as a result of migration will undoubtedly influence all aspects of their lives, culture and customs. General adaptation of the immigrant to the new environment is affected by several factors. These include educational level, technical background, previous urbanisation experience, demographic factors (age, sex, age on arrival, marital status, family size), motivation for migration, length of stay in the host country, demographic composition of the new society, industrial development, culture and social stratification (Richmond, 1984). The larger the cultural differences between the two countries, the more difficulties the immigrants will have in adapting (Almeida, 1989).

2.5.1 Factors Associated With Changes in Food Habits

2.5.1.1. Availability

Factors which have been suggested as determinants of acculturation can be grouped according to whether they are connected with the foods themselves; directly leading to exposure to the new society; or individual factors (Almeida, 1989).

Availability plays a primary role in determining food choice (Bender, 1975). A food must be accessible before a person can eat it. What food is available is determined by geographical and climatic factors coupled with various influences which affect food transportation, distribution capabilities and policies. It follows that for Chinese immigrants to maintain traditional diets, traditional foods must be both physically and economically accessible.

For those immigrants with increased budget priorities for housing and transportation, foods believed to be too expensive for the budget will be eliminated. Cuts on food expenditure are however, not always done in the most nutritionally desirable way and foods of less emotional significance are believed to be cut first (McKenzie, 1974; Yohai, 1977; Cerqueira, 1984). After achieving financial security, immigrants tend to consume items previously beyond their means, changing usually from foods rich in carbohydrate to items rich in fat, and high in energy, protein and sodium (Wenkham &

Wolff, 1970; Freedman, 1973). As such, Richmond (1984) believes that the sociocultural adaptation of immigrants cannot be considered independently of their socioeconomic status in the host country.

Whether immigrants accept or reject "new foods" has been found to be associated with their liking or disliking which is connected to the sensory properties of foods and the body's sensory mechanism (Yudkin, 1977; Al Mokhalalati, 1981; Krondl & Coleman, 1986). The addition of familiar seasonings to a "new food" tends to enhance its acceptance e.g. addition of soya sauce by Japanese immigrants to hamburgers (Rozin, 1976). How immigrants change their food habits had been postulated by Mead (1953) to be related to whether they like foods from their native land.

The joining of the labour force by women through either a desire for self actualisation or economic necessity and the splitting up of families between work and home means that there is less time for preparing and cooking foods. If traditional dishes require lengthy preparation and/or cooking then a change in the food habits of immigrants may be necessary when time constraints are present. Change may be hastened when locally prepared (convenience) foods are available. This is commonly true particularly for the breakfast meal. Tan (1982) and Yang & Fox (1979) found among Chinese immigrants to the UK and USA respectively that the traditional pattern changed to consuming convenience foods which required little or no preparation like cereals, bread and biscuits instead of the traditional congee and the like at breakfast.

2.5.1.2 Exposure

Employment of women outside the home can also lead to change in food choice as a result of contact with women of other groups and communities (Bavly, 1966). This may create an interest in other food habits which if found attractive is readily copied. For example, Grivetti & Paquette (1978) reported that some of their Chinese respondents living in California ate Mexican tortillas at least twice a month.

One of the most important factors contributing to change is the degree of exposure to new foods or food systems. The longer the exposure to non traditional foods, the more likely will be their inclusion (Hunt, 1977). This is particularly true for dairy products where studies amongst Chinese immigrants to USA (Ho et al, 1966; Yang & Fox, 1979; Crane & Green, 1980; Newman & Linke, 1982; Hrboticky & Krondl, 1984; Sukhumsuvun & Resurreccion, 1988) showed that the frequency of consumption of items like milk, ice cream and butter/margarine where previously they were not a part of the

dietary pattern were increased most where exposure was the longest. Various components directly connected with exposure have been suggested as playing an important part in adaptation. These include length of stay (Richmond, 1984; Freedman & Grivetti, 1980; Bavly; 1966), living alone or in a family (Al Mokhalalati, 1981), having children at school (Bavly, 1966; Ruck, 1979; Katone-Apte & Apte, 1980) and exposure to the mass media (Bavly, 1966).

There appears to be conflicting evidence over length of stay and changes in Chinese food habits. Grivetti & Paquette (1978) and Anderson (1988) found greater changes with regard to consumption of more American style foods with an increase in the length of stay in the host country amongst educated respondents (students, staff at a university campus and residents). whilst other researchers like Ho et al (1966) showed that longer stay Chinese students adhered more strongly to their ethnic foods than short stayers. Newman and Linke (1982) showed similar trends in their study of Chinese mothers in New York. This latter finding is confirmed by results from other studies on Chinese students which found that core foods representing dietary staples like rice (Ho et al, 1966; Krondl, Hrboticky & Coleman, 1984) or foods used three or more times a week changed little regardless of duration of residence. Greatest changes appeared to be found among the peripheral and marginal foods (Krondl, Hrboticky & Coleman, 1984).

Newly arrived immigrants can encounter difficulties in finding both familiar foods and suitable accommodation and cooking facilities to prepare their meals. A change in food behaviour may then occur. Whether immigrants can find or import their foods will determine if this change becomes transient or permanent. This will depend on the size of the immigrant community in a particular area. Availability of familiar foods was not found by Grivetti & Paquette (1978) to be an important factor in influencing Chinese immigrants' food choice. For example, despite availability of certain foods like lychees, persimmons, tree ears and waterchestnuts, the frequency of consumption decreased. This was not found to be related to price either, since the same researchers showed that despite reduced availability and increased cost, some immigrants still bought foods like snails and snakes.

Al Mokhalalati (1981) found that single people changed their food habits more than married immigrants especially if they had stayed longer in the host country. This was probably because immigrants living alone were more likely to establish friendships with people in the host country than those integrated within a family. They were also more likely to eat out especially if their accommodation lacked the cooking facilities or

turn towards convenience foods to save time or bother. Ho et al (1966) and Yang and Fox (1979) also reported similar findings amongst Chinese immigrants.

Exposure to the school environment can influence children's food preferences especially if they partake in school lunches and receive nutrition education at school (Bavly, 1966). Krondl, Hrboticky & Coleman (1984) also reported that Chinese children were tempted to increase consumption of sweet and salty foods like salami, cakes and chips because of strong influence via the mass media. At this stage of development with increasing independence and peer group influence, adolescents are likely to change both their lifestyles and dietary habits (McElroy & Taylor, 1966). This adaptation may affect their health as well as that of the next generation.

2.2.1.3 Individual Factors

Lowenberg et al (1979) observed that when a group is subject to outside influence, the older people in the group change less quickly then the younger. Other researchers (Richmond, 1984) have suggested that age on arrival in the host country is important in sociocultural adaptation.

Individual beliefs about diet and the maintenance of health may affect the type and extent of changes made in food habits. Yang & Fox (1979) found that Chinese immigrants who believed that their health had worsened after migration were found to have made less changes in food habits than those who thought it had improved or remained the same. The same researchers also found that immigrants who considered local foods to have equal or higher nutritional value than their traditional foods showed greater changes. In addition, such beliefs may include the prohibition of protein foods for pregnant women (Bolton, 1972; Wilson, 1973).

Many factors which determine food habits are derived from religious laws. Each religion has its own beliefs, ritual and ceremonies which dictate adherents' eating patterns. Religion can therefore provide positive reinforcement for ethnic identity. Al Mokhalalati (1981) observed that although Sudanese students in the UK showed a small increase in the frequency of alcohol consumption, they still adhered to their religious laws. Kies and Mianians (1981) however, indicated in their study of Iranian students in the USA that with an increase in the length of stay, there was an increase in the preference of American foods as the observance of religious dietary practices decreased.

The educational level of immigrants is another factor which influences adaptation (Krondl, Hrboticky & Coleman, 1984). Yang & Fox (1979) and Ho et al (1966) found

that Chinese immigrants with a good language ability had made greater changes than those with a poor language ability. This may lead to more interaction and exposure.

Table 2.1 gives a summary of factors which may be important when looking at factors which affect dietary change.

Table 2.1 Summary of Factors Which May Affect Dietary Change

Factors which may Increase the rate of dietary change	Factors which may Decrease the rate of dietary change
Many years in host country	Newly arrived in host country
Fluency in hosts country's language	Lack of language
Few traditional foods available	Traditional foods easily and cheaply available
Positive contact with other families	Little contact with other families
Contact with other women who buy local foods	Culturally conservative
Food advertising	Cultural restrictions on permissible foods
Women going out to work	Women staying at home
School age children	Older women in charge of shopping and cooking
Convenience foods easily and cheaply available	

The beginning of the chapter, outlined several food variables which Chang (1977) considered characterised Chinese cuisine, one of them was ideas and beliefs about food. Since this study is particularly concerned with health beliefs and ideology, the next chapter will consider this in more detail.

CHAPTER 3

CHINESE TRADITIONAL CONCEPTS OF DIET AND HEALTH

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CHAPTER 3
CHINESE TRADITIONAL CONCEPTS OF DIET AND HEALTH

Introduction

Since China is a vast country and has a large population size, local differences in disease patterns and therapeutic resources coupled with poor communication facilities may have contributed to the development of two traditions concerning diet and the maintenance of health. Historians of Chinese medicine have called them the "Great" and "Little" Traditions (Leslie, 1976; Lee, 1980). The former (classical or scholarly) became the official system of medical care in Imperial China (Needham and Lu, 1951). Its theoretical foundations and classifications of medicaments have been documented in a vast scholarly literature based on Imperial and Confucian values, classical examples include *Huang Ti Nei Ching* (The Yellow Emperor's Classic of Internal Medicine), *Shang Han Lun* (Treatise on Cold Disorders), *Mo Ching* (The Pulse Classic), and *Pen Ts'ao Kang Mu* (General Compendium of Materia Medica).

The "Little Tradition" has been used to refer to medical concepts and behaviour shared by people in any given locality. They comprise a set of loosely organised, relatively simple and empirically-based ideas about the causes, prevention and treatment of diseases (Lee, 1980). The remedies are often applied by the people themselves. Most of these folk beliefs and traditions have not been systematically identified and recorded in the literature but passed on by word of mouth through the centuries.

Within the "Little Tradition" is included the magico-religious tradition which is based on the belief in supernatural determination of illness and on the application of magic and/or religious rituals to treat illness.

In practice, the distinction between the "Great and Little Traditions" is probably not so clear cut, quite often there are areas of overlap between the two.

3.1 The "Great Tradition"

The theoretical basis of traditional Chinese medicine was elaborated about 2,000 years ago (Crozier, 1968) within the broad context of classical Chinese cosmology. According to Chinese philosophy, the human organism is regarded as a miniature version of the universe which meant that nature as a macrocosm and man as a microcosm obey the same laws (Palos, 1972). Just as the natural world adjusted to climatic and seasonal changes, man too was supposed to adjust to the outer forces of nature as well as to inner

forces like emotional and glandular changes. Two philosophical systems - the duality of Yin and Yang and the Five Phases provide the foundations of Chinese medical theory (Yangchi, 1988) which were integrated in treating patients:

> "In treating (patients), one distinguishes the five cardinal regions (where they come from); one distingushes the four seasons, and one must distinguish whether (an illness is located in the) interior or exterior, in the yin or yang (regions of the organism), and whether (an afflic tion caused by) cold or heat. (Similarly), one should distinguish (in which of the) viscera and bowels, main conduits and network (vessels an illness may have settled), and whether it is (an affliction of) the influences or the blood."

A belief in an absolute ultimate force - Tai Ch'i forms the basis of Chinese philosophy. Everything being derived from Tai Ch'i through differentiation and in the process of creation, heaven (Yang) and earth (Yin) were formed.

3.1.1 Yin and Yang

Based on the bi-polar philosophical construct of Yin and Yang (ca 4th century B.C.), these complementary opposites are neither forces nor material entities but are used to describe how things function in relation to each other and to the universe. They are also used to explain the continuous process of natural change. As well as representing these sets of correspondences, they also denote a way of thinking where all things are seen as parts of a whole. No entity could be isolated from its relationship to other entities.

Originally, the written character for Yin was a pictograph which meant the "shady side of the hill" and the character for Yang, the "sunny side of the hill" (Unschuld, 1985). The *Shih-ching*, a collection of ancient folk songs from the first millennium B.C., contains what are possibly the first beginnings of the yinyang lines of association. Since then Yin and Yang have been endowed with innumerable qualities with many of the additional connotations either related directly or derived from the original concepts. Yang now corresponds to things like day, fire, heat, dryness, light; Yang also tends to expand, flow upwards and outwards. Yin stands for night, water, cold, dampness and darkness; Yin tends to contract and flow downwards. Although in these contrasts Yang represented positive and Yin the negative side, they are conceived to exist as one entity.

Most things including foods, drugs, body organs, disease and stages of the life cycle were also classified accordingly into Yin and Yang categories.

The theory of Yin and Yang when applied to Chinese medicine describes the human body as an organic whole, unified but with opposing aspects. From the foregoing ideas, Chinese traditional medicine developed five ideas of Yin and Yang (Kaptchuk, 1986).

1. All things have two aspects: a Yin aspect and a Yang aspect for example, illnesses characterised by slowness, coolness, weakness and underactivity are Yin whilst illnesses that manifest strength, overactivity and heat are Yang.
2. Any Yin or Yang aspect are believed to be further divided into Yin and Yang. Within a Yang illness characterised by heat and hyperactivity, there may be aspects of Yin such as weakness and loss of weight.
3. Yin and Yang are thought to be interdependent e.g. in illness, overactivity has meaning only in relation to a condition of underactivity.
4. Yin and Yang are believed to control one another e.g. if Yin is excessive then Yang will be weak.
5. Yin and Yang are thought to have the ability to transform into each other e.g. when a patient has a high fever and sweats profusely (excess of Yang), the patient may be in danger of suddenly going into shock (an extreme of Yin).

The affinity of Yin and Yang to each other was held to have a decisive influence upon man's health. Perfect harmony between these two primogenial elements meant health; disharmony or preponderance of one element brought disease and even death.

3.1.2 Ch'i (Vital Energy - The Source of Life)

Chinese medicine conceives of an invisible energy force ch'i, that pervades all forms of matter to create change or movement. Ch'i is believed to circulate through the body to give life. A proper balance of ch'i throughout the body is believed to increase the body's resistance to disease. Illness results when circulation of ch'i is blocked or when organs suffer from excess or insufficient ch'i.

Different kinds of ch'i are believed to exist. An original pneuma called "yuan ch'i" or "ching ch'i" comes to the organism at birth. If an individual had been exposed to optimum environmental conditions such as proper diet and training then he

had "cheng ch'i" (rightly adjusted energy) but if there were excesses of certain kinds of ch'i then illness would result.

An excess of Yin forces is thought to produce cold air (han ch'i) whilst excess Yang forces produce hot air (je ch'i) and excess wind produces pulse air (mo ch'i). The ch'i is manifested in many physical forms. From the essential ch'i (came at birth or from food and nutrients), ching ch'i, the lighter part of this energy materialised as blood with urine as its residue, while the heavier part manifested in the human body as secretions (saliva, semen) and life energy. Both ch'i and blood are believed to circulate through the body and interchange with each other. Health is attained through the production and accumulation of sufficient ch'i in the body.

Circulation of blood and ch'i in the body is thought to be directly influenced by foods eaten. If the balance of foods consumed is right then the blood and ch'i circulation will be normal; if not the imbalance will impede circulation. Excessive internal "hotness" is believed to cause the blood to "thin out" and the amount of ch'i to increase whereas too much "coldness" is thought to make the blood thick, phlegmatic and circulate poorly whilst the amount of ch'i in the body will decrease.

3.1.3 The Five Phases (*Wu Xing*)

Tsou Yen (ca. 350-270) is generally considered by Chinese historians as the creator of the second natural philosophy that influenced the system of correspondence.

The number five was selected as the basis of Tsou Yen's theory of association, this number being important in the numerology of the period. This doctrine arranged natural phenomena and abstract concepts not into two, but into five lines of correspondence (Unschuld, 1985).

The essence of this ancient tradition was that Yin and Yang in addition to exerting their dual power was also subdivided into five tangible components or phases namely water, fire, metal, wood and earth (Porkert, 1974; Unschuld, 1985). They were believed to constitute an easily understandable foundation for the five lines of correspondence, conveying at the same time, a number of mutual relationships among various other lines. The best known are the relationships of mutual destruction and of mutual generation. These can be expressed symbolically as follows:

Water overcomes fire; fire melts metal; metal (in the form of a knife for example) - overcomes wood; wood (as in a spade) - overcomes soil; soil (as in a dike) subdues water.
Water/watering produces plants and trees, that is wood; wood brings forth fire; fire produces ashes, that is soil; soil brings forth metal; when heated, metals produce steam, that is water. (Needham, 1956).

The Five Phases were also distributed over the seasons i.e. wood belongs to Spring, fire to Summer, Earth to Late Summer, metal to Autumn and water to Winter. Gradually, these five generic categories were used for classifying more perceptions from colours, odours, flavours and emotions to organs and anatomical regions. Table 3.1 illustrates those correspondences which are in general use in Chinese medicine today.

Table 3.1 Five Phases Correspondences

Phase	*Yang* Wood	*Yang* Fire	Earth	*Yin* Metal	*Yin* Water
Colour	Blue Green	Red	Yellow	White	Black
Climate	Windy	Hot	Damp	Dry	Cold
Emotion	Anger	Joy	Pensive	Grief	Fear
Flavour	Sour	Bitter	Sweet	Pungent	Salty
Odour	Rancid	Scorched	Fragrant	Rotten	Putrid
Viscera	Liver	Heart	Spleen	Lungs	Kidney
Orifice	Eyes	Tongue	Mouth	Nose	Ears
Tissue	Tendons	Blood vessels	Flesh	Skin, hair	Bone
Bowels	Gallbladder	Small intestine	Stomach	Large intestine	Bladder
Season	Spring	Summer	Late summer	Autumn	Winter

Source: Kaptchuk, 1986

Some correspondences are derived from metaphysical premises e. g. green corresponds with wood, red with fire, yellow with earth, white for metal (silvery lustre) and black for water (the inky depths of the ocean). Other correspondences are not derived from metaphysical premises e. g. correspondence of metal with the nose, nose

is considered as the opening most often affected by diseases of the lung and in Chinese philosophy, the nasal tract is believed to be an extension of the lungs. Since the lungs are associated with metal, the nose is thought to be also.

Of particular interest are the Five Flavours. As illustrated in Table 3.1, the five flavours - salty, bitter, pungent, sour and sweet are interrelated in with the other universal systems of five:

> "The East creates the wind; the wind creates the wood; the wood creates the sour flavour; the sour flavour strengthens the liver; the liver nourishes the muscles; the muscles strengthen the heart; the liver governs the eyes ....." (Veith, 1972)

The Five Flavours of foods are believed to exert certain effects on the body including heating and cooling. However, the flavour of food is inherent and is not equated with taste. Foods with a salty flavour are thought to moisten the body, strengthen the bones and viscera, calm the nerves, loosen the bowels and reduce swellings. An excess is however, believed to harden the pulse. Salty foods manifest their effects on kidney and urinary bladder. Foods with a sweet flavour are believed to slow down the acute symptoms of disease and promote energy circulation whilst an excess is thought to cause aches and pains. Sweet flavours manifest their actions in the spleen and stomach. Sour flavours are believed to have an astringent action as well as activating blood circulation. An excess is believed to toughen the flesh. Sour flavours manifest their actions in the liver and gallbladder. Pungent flavours are considered to have the ability to induce perspiration and promote blood and energy circulation. An excess is believed to knot the muscles. Pungent flavours manifest their actions in the lung and large intestine. Foods with a bitter flavour are thought to have an antipyretic effect, eliminates dampness and stimulate the appetite. An excess is thought to wither the skin. Bitter flavours manifest their action in the heart and small intestine.

The Five Flavours also pertain to Yin and Yang - pungent and sweet to Yang; and bitter, salty and sour to Yin.

3.1.4 Yin and Yang and The Five Phases

During the 3rd and 4th centuries B.C., the Five Phases Theory and the Yin and Yang Theory existed simultaneously but independently of each other. Unlike other

traditional cultures with systems of elemental correspondences (e.g. Greek - Four Elements), the Chinese had two systems of referents. It was not until the Han dynasty (206 B.C.- A.D. 220) that the two systems began to merge in Chinese medicine. Together with the Yin and Yang Theory, the Five Phases were incorporated into the "clinical" tradition that culminated in the *Huang Ti Nei Ching*. It is not until the Song dynasty (960-1279 A.D.) that the relationship between the Phases were commonly used to explain the aetiology and process of illness (Unschuld, 1985).

Many attempts were made to fit the Five Phases neatly into the Yin-Yang structure. However, the two systems of correspondence often led to discrepancies in interpreting health and disease since the Five Phases emphasises one to one correspondences whilst Yin and Yang emphasised the need to understand the overall configuration upon which a part depends. As a result, the Five Phases theory generated a great deal of criticism. Despite this, the Five Phases theory became entrenched in Chinese medicine where sometimes facts were made to fit in with the Yin and Yang Theory if there were any contradictions in interpretations of health and disease.

3.1.5 Achievement of Harmony and Maintenance of Health Through Dietary Adjustment

To achieve harmony, a good balance between the two extremes of having either too much or too little ch'i in the body are considered important in achieving health. Other factors may also influence this balance and the overall balance of Yin and Yang.

Since food is traditionally seen to be a major source of ch'i for the body, the importance of balance was emphasised in the *Huang Ti Nei Ching* which advised man to eat and drink moderately and to adjust the various food and flavours to the season and one's state of health. In addition, it said

> "man receives the five, atmospheric influences (wind, heat, humidity, dryness, coldness) as food from heaven .... together these influences help to perfect the mind which then begins to function spontaneously." (Veith, 1972)

The maintenance of health is thus considered to be related to both constitution and personality requiring an individualised approach. In Chinese medicine, the important dimensions that are believed to influence individual choices are whether a person is fat or thin, active (Yang) or inactive (Yin) or nervous (fluctuating Yin Yang) type. Given

these categories, six possible permutations exist, which are believed to be more or less applicable to an individual and which are borne in mind when balancing the diet in addition to each season, food type and flavour.

Categories

1. For **Active Thin** people, who are thought to be characterised as having slow functioning spleens and inadequate Ch'i circulation, avoidance of stimulating foods was advocated. Combinations of sweet and salty foods were believed to aggravate their condition. Vegetables were considered to be beneficial for active thin people with the exception of aubergines and pumpkins which were said to disturb the nerves.
2. **Thin and Inactive** people were considered as having serious imbalances and tire easily since all their internal organs lack strength. Avoidance of excessively "cold" foods was thought to be essential. Thin and inactive people were advised to eat their "cold" vegetables well cooked since their "cold" properties would be neutralised by this cooking method.
3. **Active and Fat** people considered as having very efficient digestive and adsorptive mechanisms were advised to restrict their intake of "hot" foods and concentrate on "cold" foods which would also help regulate their bowels. They were advised to avoid stimulating foods such as strong teas, coffee, betel nut, liquor or alcohol, raw carrot and spicy foods in order to counteract their tendency to be overactive.
4. **Fat and Inactive** people were considered to possess weak metabolic systems resulting in flatulence, extreme sensitivity to cold, inefficient absorption and digestion of foods. Organ meats like heart, stomach, kidney, liver, brain, uterus were believed to activate the heart and kidneys, accelerate blood circulation and promote urination. Such organ meats were to be steamed or stewed or boiled. Small quantities of alcohol were considered to be helpful since it encourages blood circulation and helps to correct their tendency to have dull nerves and low body temperatures. Vinegar, since it relieves fatigue as well as promoting metabolism was also recommended for people classified in this category.
5. Those classified as being **Nervous and Active** were thought to have inadequate blood and ch'i circulation. The resulting imbalance of their nervous system causes tiredness, unsteadiness, or a bloated feeling. Vegetables with a tendency

to cause flatulence like beans and cabbage were to be avoided together with stimulating foods such as onions, coffee, ham, sausage and hot chillis. People in this category were recommended to eat raw or slightly cooked vegetables, seaweeds and citrus foods. Scallops, clams and abalone were thought to be particularly good because these foods were believed to tranquillise the nerves and brighten the eyes.

6. **Nervous and Inactive** people were said to suffer from weak digestive systems and underactive internal organs. This caused them to be unstable physically and make them tire easily. People were advised to follow a similar dietary pattern as the nervous active types. A small amount of salt was advised in their diet to reduce their nervous fatigue. Foods that were taboo included irritating foods like coffee, seafood.

3.1.6 Medicinal Foods

In addition to general diet modification to maintain health, there are many varieties of medicinal foods which are considered particularly useful in Chinese traditional diet therapy (Jinfeng, 1988) and these include the following:

1) **Porridge** made by first boiling rice (or millet, wheat and maize) for a few minutes and then at a gentler heat until the rice is mucilaginous. This is thought to provide energy whilst protecting the functions of the stomach and spleen.

2) **Thick Soups** are generally made from meat, fish or eggs. For example Carp soup and pig's liver soup are considered beneficial for diseases resulting from a deficiency of ch'i.

3) **Drinks** are made from light foods of little flavour infused in boiling water e.g. tea like infusions made mostly from flowers, leaves or fruit like chrysanthemum, mulberries, hawthorn juice. Such "cooling" drinks are considered to be good for fevers.

4) **Dishes** made by cooking at a low heat over a long period (like steaming, double-boiling and braising) during which the nutrients tend to dissolve in the liquid are easily digested and are believed to be essential for "repairing" the body particulary for women after parturition and also for the elderly.

5) **Decoctions** are usually made by putting herbs (like ginseng) into water firstly over a strong heat and then simmering. The decoction is filtered and the residue

discarded. These are considered useful for the elderly and for conditions suggesting insufficient energy.

6) **Juices** are usually prepared from fruits, roots, stem tubers, leaves or fruits of vegetables. These are considered "cold" in nature and are used for replenishing body fluid. They are believed to be particularly good for the elderly and are prepared by wrapping pieces of fresh fruit or vegetable in a gauze and then pressing them.

3.2 The "Little" Tradition - Putting Theory into Practice

A few authors have postulated explanations for the overlap of classic and popular ideas. Whilst Crozier (1970) has suggested that the "Great" and "Little" Traditions are united by a common cosmology which have provided them with their concepts of medicine, Topley (1978) believes that the two traditions are mere transformations of each other. Rather than existing as a dichotomy, Topley considers the two traditions as one conceptual continuum so that, at the level of social reality, a continuum of practitioners use similar categories but different terms for root concepts. For example, whilst hot, cold categories are used in food classifications in popular tradition, they are subsumed under Yin and Yang in classic tradition.

3.2.1 Concepts of Foods

As with classical thinking, a highly elaborated theory of food is also part of the folk tradition which is based on the belief that humours exist in the body which are arranged along the dimensions of hot/cold. This concept specifies that foods should always be selected so as to maintain an individual's internal balance of hot and cold (Anderson & Anderson, 1975; Fieldhouse, 1986). The actual temperature of foods consumed is not important, it is the effects which they produce inside the body that counts. The Hot-Cold concept of foods is believed to exist as a continuum where "hot" foods (Appendix 3.1) are believed to have a heating effect on the body with "warming" (see Appendix 3.2) having milder hot effects. Both types are thought to enables heat to be stored within the body. "Cold" foods (Appendix 3.3) are believed to have cold effects on the body, whilst "cooling" foods (listed in Appendix 3.4) have less of a cold effect. "Neutral" foods (shown in Appendix 3.5) are not believed to have any effect on the body.

In addition to this hot-cold concept, humours are also believed to be arranged along a "dry-wet" dimension. However, this concept is not as pre-eminent and is often mixed up with the hot and cold dimension.

The inherent nature of foods can be altered by different cooking methods (Tan, 1982).

Figure 3.1 Classification of Cooking Methods

COLD		NEUTRAL				HOT
Boil	Stir-fry	Steam	Stew	Grill	Roast	Deep-fry

Source: Tan, 1982

Deep-frying, roasting or baking are thought to make foods either warmer or hotter depending on their initial state. Boiling in water is believed to neutralise foods whereas the process of refrigeration cools foods. Steaming however, apparently has no effect on the hot/cold nature of the food.

In planning a meal, it is considered important that hot and cold aspects of foods should be balanced. This can be done within an individual dish like serving beef ("hot"/"warm") with green peppers ("cool") or within a meal for example steamed rice ("neutral") with vegetables ("cool"/"cold") and meat ("warm"/"hot").

Not all diet therapy is based on humoral dimensions. Just as important is the concept of "Bo". Such foods are identified as being strengthening and nourishing to the body. These "supplementary" (see Appendix 3.6) or "bo" foods are thought good for the blood, to have the power to rejuvenate the body's internal organs, mental and physical capacities and physical functions and so are particularly beneficial to elderly people. Such foods are eaten especially during the winter months as it is said that the body needs more nourishment and the blood needs to be thicker to counter cold temperatures (Koo, 1976). Examples of "bo" include wild fowl, bird's nests, racoon dogs, shark's fins and ginseng usually prepared by steaming or simmering especially with herbs. Despite these rejuvenating properties, "bo" foods in excess are thought to make the blood too thick which could precipitate certain illnesses. These deleterious effects are said to be especially true for teenagers and young adults who are already strong and healthy. If too much nourishing foods especially those of the herbal nature are consumed then such

people are considered to be more likely to suffer ill effects as a result of their greed manifesting as headaches, sore throats, and bloody noses.

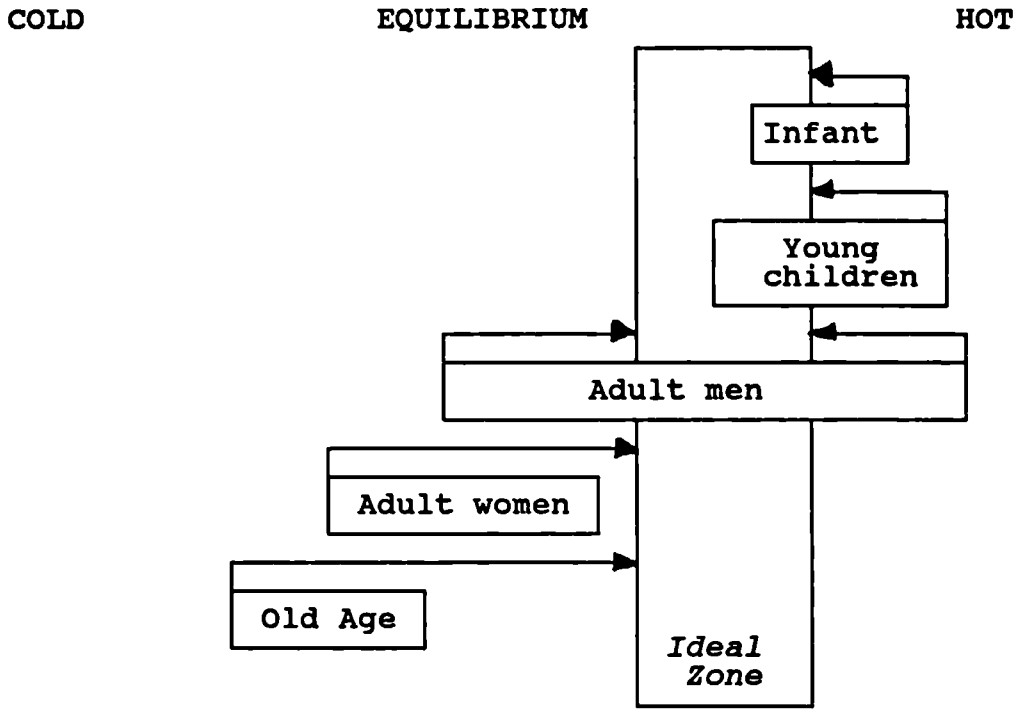
A further group of foods termed "irritating" or "poisonous" (Appendix 3.7) have also been identified (Koo, 1976). Such foods are said to have a tendency to aggravate skin diseases or open wounds. These include all types of seafood, foods that had been fermented or processed by adding salt, vegetables that turn black when exposed to oxygen e.g. potatoes, mushrooms or foods that turn a steel knife to black (e.g. aubergines). All of the "irritants" are to be avoided only if one is ill, recovering from surgery or wound, have venereal disease or skin ulcerations or boils, suffer from skin allergies or those taking herbal Chinese medicine (since such foods might interfere with the action of the drugs). To counter these "poisonous" effects, certain foods have been identified in medical classics as having antidotal properties e.g. loofah is said to dissolve the poisons of chicken pox, skin diseases and blood poisoning whilst tofu and arrowroot starch are said to have the general ability to dissolve toxins in the body (Koo, 1976).

Various studies have been carried out concerning food and health in the contexts of Hong Kong (Anderson & Anderson, 1975; Topley, 1970; Lee, 1980; Ho, 1985; Ho & Donnan, 1985) and other Chinese societies (Gould-Martin, 1978; Koo, 1976; Chang, 1981; Manderson & Matthews, 1981; Matthews & Manderson, 1981; Tan, 1982; Wheeler & Tan, 1983; Ludman & Newman, 1984) which have provided some information on Chinese folklore.

From the foregoing sections in the "Great Tradition", it can be seen that complex dietary laws exist in the classical texts. On a day to day basis, however, balancing the diet to maintain health appears to be more simple and pragmatic.

In practice, Tan (1982) in her study of Chinese families in London identified a simpler system concerning the maintenance of health. Health is considered to be a state of bodily equilibrium somewhere between two extremes called "cold" and "hot". Equilibrium being conceived of as a range of states rather than a fixed point. People are not all born at the same state of equilibrium and at each stage of life one normally occupies a position somewhere between the extremes of "hot" and "cold". That position is expressed as a person's body base. At different stages of life, an individual's body base changes. The following figure depicts concepts relating body base and the degree of tolerance to hot/cold input from foods (including herbs) during different stages of an individual's life. The degree of tolerance is denoted by the width of the box.

Figure 3.2 Body Base and Degree of Tolerance at Different Stages of Life



Source: Tan, 1982

According to this system, the body base is believed to shift from hotter to colder with increasing age (with females always being colder than males of the same age).

Although an individual's body base may be located at any point in the wide range of equilibrium, a part of this range is conceived to be "ideal" for the maintenance of health (Tan & Wheeler, 1983).

3.2.2 Prevention of Diseases

As in classical thinking, seasonal adjustment of the diet is also considered to be essential for the maintenance of health. In the summer months, when people tend to sweat profusely, "cold" foods are eaten to balance the heat. This is thought to allow the body to rest for a season since such foods are believed to be comparatively easier to digest than hot or supplementary foods. If hot foods are eaten in great quantity during the summer, then indigestion is thought to result causing pimples, sores around the mouth and eyes, sore throat, feverish feelings and constipation.

Since winter is considered to be the season for storage of energy to allow the body to withstand colder temperatures, hot and supplementary foods are eaten. These foods

are believed to allow the body to replenish and accummulate more heat. "cold" foods are avoided during this season for fear of developing chills, diarrhoea, a sallow complexion and weak movements.

Looking at particular phases of life where diet and health may be important, it can be seen that there are special regulations which exist about eating to maintain health and prevent the onset of diseases.

3.2.2.1 Infants

Since babies are believed to lie on the hotter side of the equilibrium (Fig 3.2) and their degree of tolerance to a wide variety of foods is limited, "neutral" to slightly "cool" foods are considered ideal for them (Tan, 1982).

The susceptibility of breast milk to alter in "quality" according to the intake of food usually influences many mothers to choose bottle feeds instead (Tan, 1982). Even though powdered milk is considered "hot" its quality can be changed (i.e. neutralised) by giving something "cooling" at the same time (e.g. pearl barley water or dried chrysanthemum or other flower teas, all made with rock sugar (Tan, 1982; Sung et al 1988).

As the period of growth proceeds, solid foods in the form of "neutral" rice congee is served (usually at 5 months). Food items like vegetables and fruits are not introduced until later since most are considered too "cold" (Tan, 1982).

3.2.2.3 Young Children

Although the degree of tolerance of young children is thought to be greater than at birth and during the first few years of life, extremely "hot", "cold" or "bo" foods are still restricted. Of these three types of foods, "hot" items are considered the most dangerous since the body base of children remains "hot". It has been a habit among mothers (Tan, 1982; Koo, 1976) to give their children "cooling" drinks and soups if too much "hot" foods have been consumed.

3.2.2.4 Young Adults

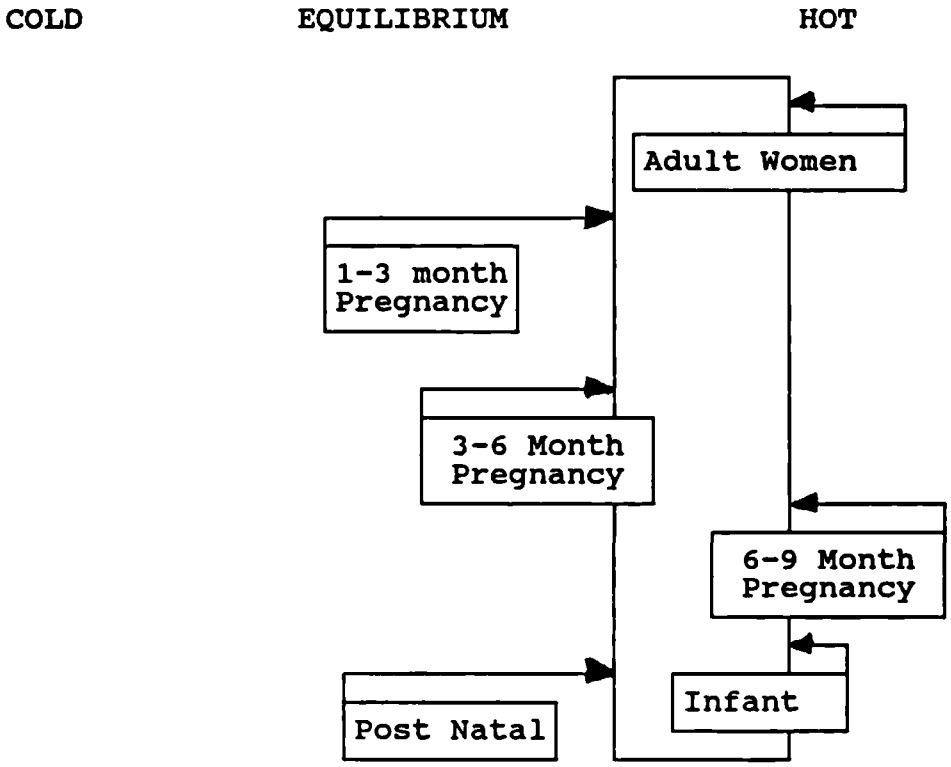
It is believed that a wider variety of foods can be consumed owing to a larger degree of tolerance (Tan, 1982). However, for adult women, certain dietary proscriptions and prescriptions have to be observed during menarche and the periods of pregnancy and lactation (Koo, 1976; Tan, 1982).

3.2.2.5 Menarche, Pregnancy and Postpartum and Lactation

Koo (1976), Tan & Wheeler (1983) found in their research that once a woman reached menarche, "bo" foods tended to be eaten regularly on the basis that energy was lost during menstruation. During the period of pregnancy or menstruation, "cold" foods were forbidden amongst their interviewees since the effect of such "cold" foods were thought to cause cramps and stop the flow of blood for the menstruating women. If such foods were eaten by pregnant mothers the result would be an unhealthy baby or a miscarriage. Instead, "hot", "warming", "neutral" foods were advocated. Ginger tea was advised to alleviate cramps during pregnancy to be sweetened with brown sugar ("supplementary" food). "Tang Kuei" (Chinese Angelica) and licorice are especially recommended during this period.

The following figure illustrates the changes in the body base of a mother through the whole term of her pregnancy.

Figure 3.3 Change of Body Base in Pregnancy



Source: Tan & Wheeler, 1983

The belief that "like produces like" taboos animal foods which have horny or scaly skin like snakes, frogs, shellfish and turtles (Topley, 1970) and seafoods like squid and octopus which have multiple tentacles since they supposedly cause either skin problems in the infant (Chang, 1981) or encourage births of children with multiple limbs (Tan, 1982). Some Chinese women avoid excess use of soy sauce for fear of the baby becoming too dark (Chang, 1981). Since the period of pregnancy is such a difficult and trying period for the mother, it appears to be safer for her to follow the advice of her experienced mother-in-law and mother to avoid placing blame on herself if a deformed or weak child is born (Tan, 1982).

After parturition, "hot" foods are considered important for the health and safety of the mother as it is during pregnancy. This is because the mother has to recover from the traumatic experience of childbirth as well as to provide a good supply of milk. Also, the birth of the baby is seen as loosing heat from the mother's body, so a "warming" dish called "geung cho" (ginger vinegar) that consists of pig's trotters, stewed with brown sugar and ginger, peanuts and dark vinegar and one that contains fresh chicken simmered with pork, ginger, wood fungus, and red wine or whisky are prescribed.

Many other variations of these dishes for the new mother to recover and produce more milk are recommended in different regions of China. Taiwanese and Hakka mothers are recommended to eat steamed chicken with yellow wine and sesame oil (Koo, 1976). Basically, the general concept was to produce blood by eating animal protein, ginger to "heat" / warm the body and get rid of the "wetness" of the birth process and wine to accelerate the blood circulation. Fruits and vegetables, are eaten only if they are well boiled to reduce their "coolness".

3.2.2.6 "Doing the Month"

During this period (which starts the moment a child is born until the moon has undergone a full cycle), strict rules are adhered to. Pillsbury (1978) underlined three basic principles followed by new mothers who must

1) avoid doing things that will cause disease and specific somatic ailments in future. For example, she cannot wash herself or her hair (although some variations on this proscription does exist) neither can she go outside for fear of catching "wind" (which may manifest as rheumatism or arthritis during later years). Pores are believed to remain open for 30 days postpartum during which time cold air/wind can enter the body (Chang, 1981)

2) avoid raw and "cold" foods and consume "hot" foods since "hot" items build up the fire energy within the body while strengthening her at the same time and

3) avoid offending the gods and contaminating others with the "dirty" birth blood. For example, it is said that entering a person's house while carrying the foetal blood will bring misfortune upon that house.

This period of confinement is believed to help the new mother recover from the "trauma" of birth and pay special attention to her baby at the same time. For a mother to be able to "do the month" however, it is crucial to have someone "accompany" her. This is only possible if there is an extended family. Tan (1982) found that many mothers in Britain were unable to maintain this practice since the new mother is often the only female in the house and has to perform all household chores etc. which makes it almost impossible for her to rest let alone cook special foods for herself.

3.2.2.7 Elderly

Since older people are believed to lie on the "colder" side of the equilibrium, their degree of tolerance decreases as old age is approached, special foods particularly "supplementary"/"bo" foods are considered to be beneficial (Tan, 1982). These are thought to strengthen the body's resistance to disease and increase longevity (offering "bo" foods to old people is considered a symbol of filial piety). Hsu & Hsu, 1977; Newman & Ludman (1984) found that older people tended to be offered more animal products like chicken, eggs, meat, soya milk, bean and seed items. In addition, easy to digest foods like soups, noodles and rice were given.

3.2.3 Concepts of Disease Causation and Treatment

Diet modification is considered by most Chinese to be an important method of treating illness.

> "To cure a disease, one should depend on medicine for 30% and on taking proper rest and proper foods for 70%." (Kleinman, 1980).

This practice is still evident amongst different Chinese societies all over the world (Topley, 1970; Koo, 1976; Ho, 1985; Choa, 1976; Lee, 1980; Sung et al 1988).

Principles governing which specific foods are to be used seemed to be dependent

on what people consider the cause of the problem to be. As with classical-scholarly thinking, diseases are believed by lay populations to result from prolonged energy imbalances and insufficiencies. Problems considered to arise either from an excess of "hot", "cold", "wet", "poisonous" energies in the body or from insufficient energy in the body are treated by consuming foods classified in the opposite nature and reducing those of the same nature.

Sung et al (1988) found that medicinal foods particularly Job's Tears, milk preparation, flower teas (particularly Five flower tea) and various other "cool" teas (like Chi-Sing Char) are given to babies if there is any evidence of excess endogenous heat produced, loss of appetite, diarrhoea, skin rashes or symptoms of any other viral illness. Frequency of administration varied from weekly to once or twice a month over the period of 30 months after birth.

Measles is considered by many mothers in Topley's (1970) study in Hong Kong as "something that has to come out". It functions to correct imbalance of "hot" and "cold" and also cleanses the system of poison inside the child's body. Abstinence from "hot" or "poisonous" foods such as goose, duck, carp and pheasant is required. A vegetarian diet is generally recognised as "cooling" was recommended.

Koo (1984) found in her study in Hong Kong that ailments thought to result from an excess of "hot" like constipation, haemorrhoids, acne/pimples or "cold" energy like asthma, bronchitis, diarrhoea are treated with foods and/or herbal teas and/or herbal soups classified in the opposite nature and those resulting from insufficient energy like anaemia, diabetes are remedied by the consumption of energy boosting tonics.

The use of specific foods for diseases have been described (Koo, 1984; Ho, 1985), based on the concept of sympathetic magic. For example, a dish of pig's brain and walnuts is prescribed for curing headaches since the convolutions of a walnut resembles those of the brain organs (Anderson, 1988; Koo, 1984) and red jujubes and port wine are thought to strengthen the blood mainly because of their red colour (Anderson, 1988).

3.3 Objectives and Purpose of this Project

From the foregoing account we can see that over the past 2000 years, a variety of differently conceptualised systems of therapy, partly overlapping, partly antagonistic have coexisted in China. Today, in the practice of Chinese medicine, there are 3 schools of thought: traditional, following most of the ancient (classical scholarly) concepts;

modern imported mostly from the west; and folk used by laymen. Diet therapy remains an important aspect of both traditional and folk medicine in modern China and Hong Kong.

The aim of this project was to examine the persistence of food related health beliefs in the Chinese community in London and the extent to which health professionals were aware of such beliefs and felt able to accommodate them in patient management. Through a series of studies, the project has investigated

1. The traditional concepts concerning prevention of disease and maintenance of health among a group of older members of the Chinese community in London
2. The extent to which a group of Chinese diabetic patients considered the dietary advice they had received to coincide or contradict their perception of the appropriate management of the disease and also the extent to which they were following the advice given.
3. The awareness and knowledge of a sample of chief dietitians concerning Chinese ideas about diet and health; and management of Chinese patients and views about the provision of service within the National Health Service to ethnic Chinese patients.
4. The awareness and knowledge of a sample of Chinese and Caucasian doctors concerning Chinese ideas about diet and health; management of Chinese patients and views about the provision of service within the NHS to ethnic Chinese patients.

While in the past, nutrition education has addressed nutritional problems associated with particular ethnic minority groups in the UK, there has been little recognition of the different conceptual background from which such individuals may approach the whole issue of the relationship between diet and health. This series of studies sought to elaborate the background understanding of this relationship in the Chinese and explore the possible areas of difficulty at the interface with the health delivery system.

CHAPTER 4

A STUDY OF ELDERLY CHINESE IN LONDON - KNOWLEDGE ABOUT TRADITIONAL BELIEFS AND MAINTENANCE OF HEALTH

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A STUDY OF ELDERLY CHINESE IN LONDON - KNOWLEDGE ABOUT TRADITIONAL BELIEFS AND MAINTENANCE OF HEALTH

As seen in the previous chapter, the theories underlying classical Chinese medicine are quite well documented in the literature. However, the views of lay Chinese populations on the properties of foods, causation of common ailments, their treatment and prevention on a disease-specific basis are less well known. This is particularly true in the UK.

4.1 Aim and Objectives

The aim of this study was to examine the extent to which both classical and folk ideas concerning the role of food in health and illness still persisted among a group of elderly Chinese in Britain.

The objectives of this study was to examine:-

1. Knowledge of the traditional concepts in the classification of foods and diseases
2 Beliefs about food types and flavours and their effects on body organs
3. Beliefs about diet and the maintenance of health, particularly the influence of age and seasonality on food choice
4. Beliefs about the causation of various health problems
5. Dietary prescriptions recommended for the treatment of health problems
6. The process of seeking treatment for diseases

This chapter will examine knowledge concerning traditional beliefs about food and diseases and the maintenance of health i. e. objectives 1-3, whilst Chapter 5 will look at beliefs about disease causation and management.

4.2 The Study Population

Women are a particularly important group to study since in Chinese society, women are not only the transmitters of health concepts but they also socialise their children and teach them about body hygiene, disease and health. In addition, they make the decision about what kind of health care is necessary in each situation and whether problems are to be treated at home or by a Chinese or western trained professional. The

traditional obligation of caring for ones parents also mean that grandmothers or mothers-in-law would live with the family and might stress traditional health concepts and food-related health practices over western ones. Older women are the most frequently used sources of advice related to diet, childbirth and beauty (Topley, 1970).

In view of their longer life expectancy, it was anticipated that women were likely to be over-represented in the elderly Chinese population. It was, however, considered desirable to include men in the study for comparison. In practice though, there appeared to be no clear differences in beliefs between male and female respondents although there was a difference in their level of involvement in food preparation activities.

4.3 Methodology

4.3.1 Methods of Data Collection

Most respondents were expected to be illiterate which meant that it was essential to collect data by personal interview. Due to the geographical dispersal of the Chinese in Britain and the fact that they are represented in larger numbers in London, Liverpool and Manchester, the limited research funds rendered extensive travelling to all areas impossible, so it was decided to confine research to just one area - London.

4.3.2 The Interview Schedule

Each respondent was interviewed by the researcher in Cantonese using a structured questionnaire (Oppenheim, 1986) which covered the following areas:

a) *Socioeconomic Characteristics* - This included personal details on areas such as place of birth, occupation, marital status, literacy, educational attainment, age, speaking dialect(s), years of residence in UK and also in other countries before migration to the UK.

b) Various sections were designed to probe the respondents' dietary beliefs concerning the maintenance of health as regards adjustment of the diet according to age and season; effects of different types and flavours of foods on the body and its organs; knowledge of the Hot/Cold concept in relation to foods and diseases; the classification of various common food items and conditions according to whether they lie on the Hot / Cold, Dry / Wet, Supplementary / Poisonous dimensions; and food proscriptions / prescriptions for the treatment and prevention of certain symptoms and diseases.

4.3.3 The Population and the Sample

Data for the study was collected in three Chinese community centres located in Camden, Westminster and Tower Hamlets in London.

To be selected for study, subjects were required to fulfil the following criteria:

a) To be Chinese or of Chinese descent

b) To be 60 years old or over

c) To either attend the Elderly Luncheon Club lunches available in the Camden and Tower Hamlets community centres or attend the afternoon group for the elderly in the Westminster centre.

Initial visits to the community centres were spent asking each member present whether they would be willing to participate in the study. The names of all potential respondents fulfilling the above criteria were written down so that during each subsequent visit appointments could be made with subjects contained in this list.

4.3.4 The Pilot Study

A pilot survey was conducted to assess the adequacy of the questionnaire and of the sampling frame; variability within the population group; and the range of answers chosen for precoded questions. The questionnaire (Appendix 4.1) covering the aforementioned areas was first tested informally on elderly relatives after which it was piloted on 10 Chinese subjects attending the Camden and Westminster community centres. Permission for conducting interviews with the population group was obtained from the organisers of the centres who then introduced the researcher and explained the objectives of the study to their members and urged their cooperation. Initially, some difficulties were experienced in recruiting subjects for interview. However, through casual visits, informal chats were carried out with members and staff of the centres to establish a good rapport and also to allow members to become accustomed to the researcher. After restating the objectives of the study and ensuring confidentiality of information collected, many members were happy to cooperate hoping it would promote some understanding between them and the host society.

The preliminary inquiries showed that the elderly Chinese interviewed still retained a traditional approach to the prevention and management of certain diseases through dietary modification which justified further investigation.

The pilot questionnaire also included a 24 hour recall and a diet history which was intended not only to investigate the qualitative nature of foods eaten, meal patterns,

frequency of consumption of different foods but also to record whether respondents took into account energies and flavours of foods when planning a meal and whether they had made any actual dietary changes as a result of illness. In general, respondents were able to recall what they had eaten the day before the interview and frequency of consumption of basic foods like rice, meat, fish, poultry, eggs, vegetables and fruit. However, since this was a single inquiry this part of the questionnaire failed to pick up dietary changes, for example, in response to illness since none of the interviewees were suffering from any ailments at that particular time. An alternative would have been to repeat 24 hour recalls on a number of occasions, reflecting different seasons and increasing the likelihood that an illness-related dietary change might be reported. Or, to use participant observation to see the extent to which humoral beliefs influenced food consumption and inquiring in depth about particular practices observed or described. However, given the limited research funds and personnel available these ideas were abandoned. It was therefore decided to try and record reported dietary changes in response to season, illness and other factors by phrasing some questions differently, clarifying certain wordings and adding extra questions. The questionnaire was then repiloted on 6 more Chinese respondents.

4.3.5 The Main Study

In total, 156 members attending the three community centres visited were interviewed (See Appendix 4.2 for the English version of the questionnaire). Although no member refused to cooperate, 11 out of the total interviewed were very unhelpful and regarded the researcher with suspicion each time they were approached, saying that they had no knowledge to offer, 'I eat simply, I include meat, vegetables, rice and fruit in my daily meals, that is all. Don't bother me any more!' As a result, the final analysis was based on 145 interviewees.

All interviews were carried out on weekdays before and after lunch (10-12.30am and 2.00-3.00pm) in Camden and Tower Hamlets and between 2.00-4.00pm in Westminster. Questionnaires took from between 45mins to 1hr 45mins to administer. An effort was made to find a room to conduct interviews in quiet surroundings to increase the level of respondent motivation. However, the general lack of space in the community centres visited meant that interviews had to be held in the same room where the other members congregated. Many times, the interviews had to be stopped because of noise from other conversations, announcements, discussions, videos and music. Some respondents were prone to wander from the main topic of the questionnaire which

prolonged the interview. However, if signs of concentration loss, boredom or impatience were shown, interviews were postponed until either the following day or a time convenient to the respondent.

4.4 Data Processing and Statistical Analysis

Closed questions in which respondents were given a limited choice of answers were coded after each interview. Since the questionnaire contained some open-ended questions, numerical codes could not be assigned at the outset because the range of possible answers was unknown. Consequently, at the end of data collection, a listing of responses was drawn up and a coding frame devised and each answer given a numerical code.

All codes were then transferred onto take-off sheets and entered for statistical analysis onto a computer data file using SPSSx and Minitab at the KQC Computer Centre. The statistical significance of relationships between certain sets of variables were determined by Chi-Square analysis (relationships were considered statistically significant at the 0.05 level).

4.5 Respondents Characteristics

In total, 156 Chinese elderly subjects were interviewed, but only 145 questionnaires were usable which left a sample consisting of 23 males and 122 females

4.5.1 Country of Birth and Age

The majority of respondents (115 - 79%) were born in Hong Kong whilst 16% (23) and 5% (7) originated from mainland China and Malaysia respectively.

Subjects were aged between 60 and 80 years old (x = 69 years).

Table 4.1 Age Distribution of Respondents by Country of Birth

Age Group	Country of Birth			Total
	Mainland China	Hong Kong	Malaysia	
60-64	7 (5%)	51 (35%)	0 (0%)	58 (40%)
65-69	7 (5%)	33 (23%)	4 (3%)	44 (30%)
70+	9 (6%)	31 (21%)	3 (2%)	43 (30%)
Total	23 (16%)	115 (79%)	7 (5%)	145 (100%)

Subjects born in Hong Kong were younger than those from Mainland China and Malaysia although this was not statistically significant.

4.3.2 Arrival and Length of Stay

Respondents had arrived in Britain via one of 5 routes, namely, directly from Hong Kong, directly from Mainland China, directly from Malaysia, indirectly from Mainland China via Hong Kong and indirectly from Malaysia via Hong Kong.

Direct Migrants

Of the respondents arriving directly from Hong Kong, 85 (74%) originated from the rural New Territories whilst 30 (26%) came from the urban areas of Hong Kong island (See Table 4.2).

The majority of subjects who came directly from Mainland China came from Kwantung province (88%) and were predominately from a rural background.

In contrast, 83% of direct migrants from Malaysia came from urban areas.

Table 4.2 Country of Origin According to Urban or Rural Residence

Country of Birth	Urban	Rural	Total
Direct			
Mainland China	2 (12%)	14 (88%)	16 (100%)
Hong Kong	30 (26%)	85 (74%)	115 (100%)
Malaysia	5 (83%)	1 (17%)	6 (100%)
Indirect			
Mainland China	1 (14%)	6 (86%)	7 (100%)
Malaysia	0 (0%)	1 (100%)	1 (100%)
Total	38 (26%)	107 (74%)	145 (100%)

Indirect Migrants

A minority of respondents from Mainland China came to Britain via the rural New Territories of Hong Kong (6) and urban districts of Hong Kong Island (1). One Malaysian Chinese migrated to Britain via the rural New Territories.

The mean age of arrival of this group of subjects to Hong Kong was 37. 8 years ranging from 15 to 54 years. They had spent an average of 23. 1 years in Hong Kong (10-42 years) before coming to Britain (See Table 4.3).

Table 4.3 Mean Age of Arrival, Departure and Length of Stay in Hong Kong

	Mainland China	Malaysia	Total
Age of Arrival in Hong Kong	21.6 (15-30)	54.0 (-)	37.8 (15-54)
Age of Departure from Hong Kong	54.9 (46-62)	64.0 (-)	59.5 (46-64)
Length of Stay in Hong Kong	36.1 (17-42)	10. 0 (-)	23.1 (10-42)
Number of Cases	7	1	8

The mean age of arrival for all migrants to Britain was 52. 3 years with a range of 21-72 years.

Table 4.4 Mean Age of Arrival in Britain of all Respondents

Country of Birth	Age of Arrival in Britain	Years of Residence in Britain
Direct Migrants		
Hong Kong	49.4 (21-72)	16.8 (3-40)
Mainland China	35.3 (22-56)	32.1 (15-45)
Malaysia	57.7 (45-67)	14.0 (2-34)
Indirect Migrants		
Mainland China	54.9 (46-62)	10.6 (4-25)
Malaysia	64.0 (-)	3.0 (-)
Total	52.3 (21-72)	15.3 (2-45)

The mean length of stay in Britain of all respondents was 15 years ranging from 2-45 years. 10 (7%) respondents had just arrived in the past 2-4 years while 2 (2%) had already lived in Britain for 40-45 years (See Table 4. 5).

Table 4.5 Length of Stay in Britain of all Respondents

Years in UK	Number	%
2-4	10	7
5-9	18	12
10-14	31	21
15-19	34	23
20-24	11	8
25-29	9	6
30-34	18	12
35-39	12	8
40-45	2	2
Total	145	100

It was decided to divide these categories into just 2 groups - shorter stay residents (up to 15 years) - 75 (52%) and longer stay residents (over 15 years) - 70 (48%). Statistical analysis showed that more longer stay residents were born in Mainland China, compared with short stay residents more of whom originated from Hong Kong ($p < 0.02$).

4.5.3 Education and Language Skills

Whilst only 10% (14) of respondents were educated up to secondary school, the majority (90% - 131) had received only some primary schooling.

Proficiency of Spoken and Written English

Although 48% (70) of respondents had been resident in the UK for over 15 years, only a small minority claimed a good proficiency of spoken (5 - 4%) and written English (4 - 3%).

Table 4.6 Proficiency of Spoken and Written English

Proficiency	Spoken	Written
Good	5 (3%)	4 (3%)
Average	25 (17%)	16 (11%)
Poor	115 (79%)	125 (86%)
TOTAL	145 (100%)	145 (100%)

Good = Fluent in English
Average = Can understand some English words
Poor = Can understand only simple English words

Dialects Spoken

The majority of respondents (123 - 63%) were Cantonese speakers - the language of urban Hong Kong and Kwantung Province of Mainland China. Some interviewees were multilingual, being able to converse in Hakka (a dialect of the rural New Territories of Hong Kong), Hokkien (principle dialect of Malay Chinese) and Mandarin (official language of Mainland China). Although all interviewees could understand Cantonese, nearly one third (32%) of Hakka speakers were unable to speak Cantonese.

Table 4.7 Dialects Spoken by All Respondents

Dialects	Number	% *
Cantonese	123	63
Hakka	69	35
Hokkien	3	2
Mandarin	1	1
Total	196	
* Column adds to >100% because respondents could give more than one answer		

4.5.4 Occupation

The majority of interviewees had always been housewives (99 - 68%). Of the remaining 46 (32%), 9 (6%) had been employed previously as civil servants in Hong

Kong; 1 (1%) as a midwife; and 1 (1%) as a nursing sister in Malaysia; 6 (4%) as factory workers in Hong Kong and 9 (6%) as restaurant workers in this country. 19 (13%) respondents declined to specify the nature of their jobs before retirement.

4.5.5 Marital Status

Just over a half of respondents (51% - 74) were married whilst the remaining were either widowed (this confirms the higher life expectancy rates of women) or single.

Table 4.8 Marital Status

Marital Status	Number	%
Married	74	51
Widowed	54	37
Single	17	12
Total	145	100

4.5.6 Health

Of the 145 respondents interviewed, only 7 (5%) reported suffering health problems. Hypertension appeared to be the most common problem which required strict adherence to a low salt regimen by 3 respondents.

Table 4.9 Health Problems

Health Problems	Number	On Special Diets
Hypertension	3 (2%)	Low salt
Pernicious anaemia	2 (1%)	---
Gout + Obesity	1 (1%)	Low calorie, low fat, low protein
Diabetes	1 (1%)	Diabetic
Total	7 (5%)	

Although the 2 interviewees who were diagnosed as suffering from pernicious anaemia did not report following a particular diet, both had to have 3 monthly injections

of hydroxocobalamin to maintain health. As well as being overweight one subject was afflicted with gout which meant that she had to follow a low calorie, low fat and low protein diet. One respondent was recently diagnosed as being diabetic (maturity-onset non-insulin-dependent diabetes mellitus) which required adherence to a diabetic regimen.

4.5.7 Food Purchasing Patterns, Meal Planning and Cooking

Amongst respondents interviewed, food purchasing in the UK was predominately a female activity.

Overall, 66% (97) of respondents were actively responsible for buying food (Table 4.10). There was a clear division between the two sexes however, with 75% (92) of females and 22% (5) of males carrying out the task. Of the 23 male interviewees, 14 (61%) delegated their wives to purchase foods. Other family members were also involved in the food shopping activity with daughters and daughters-in-laws responsible in 17% (24) of the interviewees households.

Table 4.10 Household Members Responsible for Buying Food

Household Members	Interviewees		TOTAL
	Male	Female	
Respondent	5 (22%)	92 (75%)	97 (66%)
Spouse	14 (61%)	9 (7%)	23 (16%)
Daughter	3 (13%)	16 (13%)	19 (13%)
Son	---	1 (1%)	1 (1%)
Daughter-in-law	1 (4%)	4 (3%)	5 (4%)
TOTAL	23(100%)	122(100%)	145(100%)

Compared with food shopping which was largely the domain of other family members, a larger proportion of interviewees were responsible for the planning (75% - 108) (Table 4.11) and cooking (72% - 104) of meals at home (Table 4.12).

Table 4.11 Household Members Responsible for Planning Meals

Household Members	Interviewees		TOTAL
	Male	Female	
Respondent	7 (30%)	101 (83%)	108 (75%)
Spouse	14 (61%)	9 (7%)	23 (16%)
Daughter	2 (9%)	8 (7%)	10 (6%)
Son	---	1 (1%)	1 (1%)
Daughter-in-law	---	3 (3%)	3 (2%)
TOTAL	23(100%)	122(100%)	145 (100%)

As with food shopping, the planning and cooking of meals was mainly a female activity. Of the respondents interviewed, 83% (101) of women were involved in the planning process compared with 30% (7) of men. Similarly, the task of cooking was performed by 80% (98) of female interviewees compared with 26% (6) of male subjects.

Table 4.12 Household Members Responsible for Cooking Meals

Household Members	Interviewees		TOTAL
	Male	Female	
Respondent	6 (26%)	98 (80%)	104 (72%)
Spouse	15 (65%)	10(8%)	25 (18%)
Daughter	2 (9%)	9 (7%)	11 (7%)
Son	---	2 (2%)	2 (1%)
Daughter-in-law	---	3 (3%)	3 (2%)
TOTAL	23(100%)	122(100%)	145(100%)

4.5.8 Attitudes Towards Diet and Health

Nearly all of the interviewees, 141 (97%) were interested in food, only 4 (3%) were not and the importance they attached to food choice was also clear. The choice of foods to maintain health was considered not to be important by only 14 (10%) subjects whilst the remaining considered that it was essentially important (5 - 3%), important (43 - 30%), and moderately important (83 - 57%) to select foods for health reasons. Despite the belief in the importance of choosing foods for health, over a half of respondents (56%

- 82) reported that they did not consciously adjust their diets to maintain health compared with 36% (52) who consciously balanced their intake of foods, 8% (11) of respondents were unsure of the question and so declined to answer.

4.6 Knowledge of Traditional Concepts in Relation to Foods

All the subjects were aware of the Hot/Cold concept in relation to foods and when respondents were asked from whom or from what sources they had learnt about traditional ideas concerning foods and diseases, the majority of respondents (48% - 58) said that they had learnt from their own experience. This probably indicates that respondents found it difficult to identify a single source of information.

Table 4.13 Sources of Information on Traditional Ideas Concerning Foods and Diseases

Source of Information	Number	% (N=122)*
Own experience	58	48
Grandparents/parents	22	18
Word of mouth	14	12
All kinds of source	13	11
Friends/relatives	12	10
Books	3	3
Total	122	
* Column adds up to >100% because respondents could give more than one answer		

4.6.1 Classification of Food - Energies

As discussed in Chapter 3, foods can be described as hot, warm, neutral, cool, cold, supplementary and poisonous depending on their effects in the body as well as on methods of cooking. Respondents were asked to classify some basic food items used widely in Chinese cuisine as well as some 'western' foods.

Classification by respondents of 57 food items is illustrated in Appendix 4.3. There was some contradictions in categorising the hotness/coldness of foods by

interviewees. For example, bananas were categorised by 12 (8%) subjects as lying on the "Hot"/"Warm" end of the "Hot"-"Cold" dichotomy whilst 65 (45%) others classified it as being "cooling"/"cold". Greatest agreement amongst respondents tended to be for common/basic food items. Table 4.14 gives a list of foods which brought agreement from over 40% of informants.

Table 4.14 Classification of Food Items

Energies	Food Items	Number
Neutral	Boiled rice	105 (72%)
	Rice congee	73 (50%)
Cool/Cold	Bitter gourd	100 (69%)
	Duck	79 (55%)
	Ice cream	80 (55%)
	Celery	73 (50%)
	Banana	65 (45%)
	Orange	68 (47%)
Hot/Warm	Fried rice	90 (62%)
	Beef	82 (57%)
	Ginger	77 (53%)
	Chicken curry	74 (51%)
	Spring onions	70 (48%)
Supplementary	Chicken blood	98 (68%)
	Spinach	59 (41%)

Not surprisingly, there was little disagreement among respondents about the classification of boiled white rice, whilst dark meats, curry and other pungent tasting ingredients and fried products were agreed to be hot/warm by over a half of respondents (82 - 57%). Vegetables and fruits as well as physically cold items and animals reared in watery surroundings like duck were generally agreed to be cool/cold. Chicken blood on the basis of 'like helps like' was considered by over two thirds of respondents to be supplementary whilst spinach was also assigned to this category by 41% (59) of

interviewees because "it contains iron" which suggests the incorporation of western nutritional information.

The "wet"/"dry" dimension was not considered to be very important by the informants, only three items in the list of foods presented for categorisation were deemed as being "wet". Fish and shellfish were considered "hot" and "wet" by 4 (3%) and 29 (20%) respondents respectively. Whilst aubergine was categorised as being just "wet" by 42 (29%) subjects.

Interestingly, 'western' food items elicited a large number of don't know responses from interviewees. Particularly, milk, butter, cheese, white bread, brown bread, cornflakes, yogurt, biscuits/cakes, baked beans, hamburgers, fishfingers, cottage pie, custard, rice pudding and minestrone soup brought don't know answers from a half or more of respondents.

Some food items were assigned by interviewees to other categories not related to energy balance (see Appendix 4.4). Besides shellfish, spring onions, fried rice, biscuits / cakes and sweet and sour pork, the remaining 51 foods were categorised by some respondents as being nutritious i. e. providing vitamins and other nutrients essential for health if taken in moderation. Specifically, orange, fish, and garlic were believed by 25% (36) or more interviewees as being particularly nutritious (nutritious being used as a modern version of "supplementary").

Some of the food items categorised as being nutritious were considered in excess to be bad for health by other interviewees. These included fried rice, hamburger, chicken curry, cornflakes, brown bread, ice cream, cheese, eggs and baked beans.

Whilst banana was thought by 5 (3%) subjects to aid digestion, 4 (3%) other respondents believed excess consumption to contribute towards producing sputum. Milk was also considered by 5 (3%) interviewees to have this ability for stimulating mucous production.

Garlic was deemed by 21 (15%) subjects to be effective at killing off germs whilst ginger was believed to be useful for dispelling exogenous wind (10 - 7%) trapped in the body.

There was general agreement among respondents that cooking methods could change the categorisation of a food. Boiled rice was classified as being an essential component in the diet by 15 (10%) subjects whilst the watered down version (rice congee) was believed by 15 (10%) others to have the ability to cleanse the gastrointestinal tract along with the herbal soup Ching Bo Leung. In addition, frying was thought to alter

the "neutral" nature of boiled rice and the "cooling" nature of fish to "hot". Moreover, 20 (14%) or more interviewees declined to classify chicken, beef, pork and duck into any category because they said that their nature depended on the cooking procedure (as well as other ingredients) used. The season of consumption was considered an important factor when categorising foods particularly for lamb (13 - 9%) and snake (13 - 9%).

Despite the discrepancy in classifying some foods there was some agreement amongst respondents' as well as between interviewees' categorisations of certain basic foods in this study and those obtained in other studies by Anderson (1980) and Koo (1976). Out of 34 basic food items (excluding 'western' foods) compiled from the lists documented by these authors, half or more subjects in this project agreed with their classifications for 13 items (Appendix 4.4).

It was decided to calculate an overall index of agreement for each respondent who attempted the classifications of these 34 items. Subjects who disagreed with the classification of a food from Anderson and Koo's lists were assigned -1, those who agreed 1 and a don't know answer was given a zero. An overall index of agreement was then calculated for each informant. The average index of agreement for the 145 respondents was only 9. Just one person agreed with the classifications of all 34 foods.

The index was then grouped into 4 categories of agreement: < 0 (No agreement), 1-9 (low), 10-18 (medium) and 19-36 (high).

Table 4.15 Index of Agreement with other Food Lists

Category	Number	%
< 0	19	13
1 - 9	57	39
10 - 18	47	32
19 +	22	15
Total	145	100

People who apparently had less ability to classify foods (i. e. score low) were less likely to make adjustments to their diet in relation to season or ageing although this finding was not significant.

Table 4.16 illustrates the socioeconomic characteristics of respondents and the index of agreement on the classifications of food items. Interviewees with poor English speaking ability were found to be more likely to hold onto traditional ideas as indicated by their higher index of agreement. The same trend was found for respondents with poor written English.

Interviewees born in mainland China had a higher index of agreement than those born in Hong Kong although this was not significant. Surprisingly, respondents whose occupations involved food preparation (i. e. mainly housewives) were not more likely to agree with classifications from other food lists (i. e. did not score highly).

Table 4.16 Socioeconomic Characteristics and Index of Agreement on the Classification of Food Items

Characteristics	Index of Agreement			
	No N (%)	Low N (%)	Medium N (%)	High N (%)
Age: 60-64	11 (19.0)	21 (36.2)	16 (27.6)	10 (17.2)
65-69	6 (13.6)	18 (40.9)	16 (36.4)	4 (9.1)
70 + Over	2 (4.7)	18 (41.9)	15 (34.9)	8 (18.6)
Country of Birth:				
Mainland China	4 (17.4)	5 (21.7)	8 (34.8)	6 (26.1)
Hong Kong	15 (13.0)	48 (41.7)	36 (31.3)	16 (13.9)
Malaysia	0 (0.0)	4 (57.1)	3 (42.9)	0 (0.0)
Education:				
Up to 1° School	18 (13.7)	50 (38.2)	41 (31.3)	22 (16.8)
2° School	1 (7.1)	7 (50.0)	6 (42.9)	0 (0.0)
Sex: Male	4 (17.4)	13 (56.5)	6 (26.1)	0 (0.0)
Female	15 (12.3)	44 (36.1)	41 (33.6)	22 (18.0)
Years in UK:				
Up to 15	7 (9.3)	26 (34.7)	28 (37.3)	14 (18.7)
16 + Over	12 (17.1)	31 (44.3)	19 (27.1)	8 (11.4)
Occupation:				
Food Preparation	4 (15.4)	12 (46.2)	8 (30.8)	2 (9.1)
Professionals	0 (0.0)	5 (45.5)	6 (54.5)	0 (0.0)
Other	15 (13.9)	40 (37.0)	33 (30.6)	20 (18.5)
Proficiency of Spoken English:				
Good to Average	5 (16.7)	12 (40.0)	12 (40.0)	1 (3.3)
Poor	14 (12.2)	45 (39.1)	35 (30.4)	21 (18.3)
Proficiency of Written English:				
Good to Average	4 (20.0)	7 (35.0)	8 (40.0)	1 (5.0)
Poor	15 (12.0)	50 (40.0)	39 (31.2)	21 (16.8)

4.6.2 Beliefs about Beneficial Food Energies on Specific Organs

According to the classical Chinese medical theory of concordances and the Five Phases, different colours are associated, with different organs of the body. So, the colour black corresponds with the kidney, red with the heart, yellow with the spleen, white with the lungs and blue/green with the liver. Eating foods of certain colour is thought to help correct any imbalance in the corresponding organ.

As can be seen in Table 4.17, this thinking was apparent for those respondents who were able to relate examples of foods thought to be beneficial for specific body

organs. **Red** beans were considered to be helpful for the **heart, black** sesame soup for the **kidneys** and **white** sugar for the **lungs**. Consumption of ginseng to benefit the heart may be derived from the semantics of ginseng and heart. Ginseng in Cantonese is known as "yan sum" whilst heart is "sum". Only a small number of subjects were willing to attempt this, which suggests that beneficial food energies for specific organs are not widely held important.

Table 4.17 Foods Believed to be Beneficial for Specific Organs

Organ	Energy	Examples of Foods
Heart	Neutral (4-80%) Warming (1-20%) (N = 5)	Ginseng (2-33%) Plain foods (2-33%) Cinnamon (1-17%) Red beans (1-17%) (N = 6)
Lung	Hot (2-40%) Neutral (2-40%) Warming (1-20%) (N = 5)	Sugar (1-50%) Peanuts (1-50%) (N = 2)
Kidney	Neutral (2-100%) (N = 2)	Kidneys (5-83%) Black sesame soup (1-17%) (N = 6)
Spleen	-----	-----
Liver	Warming (2-100%) (N = 2)	Pig's liver soup (2-100%) (N = 2)
Intestines	Neutral (2-100%) (N = 2)	Banana (1-50%) Intestines (1-50%) (N = 2)
Gallbladder	Neutral (2-67%) Hot (1-33%) (N = 3)	Snake gallbladder wine (1-100%) (N = 1)
Stomach	Neutral (3-75%) Warming (1-25%) (N = 4)	Cinnamon (1-100%) (N = 1)
Brain	-----	Pig's brains (1-100%) (N = 1)
Bones	-----	Bone Marrow (5-50 %) Canned fish (2-20%) Pigs trotters (2-20 %) Calcium (1-20 %) (N = 10)
Eyes	Neutral (2-100%) (N = 2)	Carrots (3-43%) Fish eyes (2-29%) Chrysanthemum tea (1-14%) Chinese vine leaves (1-14%) (N = 7)

The various specific foods considered by respondents to be beneficial for each organ also demonstrates the axiom of "like helps like" for example, consuming kidneys, brains, eyes, bones, intestines, liver and gallbladder wine were believed to strengthen the respective internal organ.

4.6.3 Effects of Different Food Types on the Body

Although on average respondents had poor agreement amongst each other as well as with classifications from other studies, many were able to identify a variety of symptoms of overheating and overcooling which were consistent with findings from other studies (Anderson, 1980; Koo, 1976; Topley, 1970). Whereas the majority of respondents were able to identify symptoms, there was a difference between respondents ability to relate symptoms of overheating and overcooling.

Symptoms of Excess Heat in the Body

92% of subjects were able to identify symptoms associated with excess heat in the body. These were believed to manifest itself in any or all of the following symptoms (Table 4.18).

Table 4.18 Symptoms of Excess Heat

Symptoms	Number	% (N=134)*
"Hot air" symptoms+	41	31
Skin problems	41	31
Nosebleeds	37	28
Sore throat	25	19
Mouth ulcer	14	10
Face flushes	11	8
Gum problems	11	8
Constipation	11	8
Fever/sweating	9	7
Coughing of blood	7	5
Overstimulation	7	5
Dry lips	5	3
Inflammation	4	3
Dry throat	4	3
Haemorrhoids	4	3
Diarrhoea	3	2
Headache	3	2
Thirst	2	2
Blurred vision	2	2
Burning sensation	1	1
Soreness	1	1
Dry cough	1	1
Insomnia	1	1
Heart disease	1	1
Toothache	1	1
Total	147	108
* Columns add up to more than 100% because one respondent could give more than one answer		

+ Hot air symptoms includes sore throat, nosebleeds, acne/pimples and mouth ulcers

The excess was thought to be derived not only from eating too much "hot" foods but also from disease or exposure to actual heat like the sun.

Amelioration by interviewees of these "heating" effects was mainly by dietary means using "cooling" foods and drinks. Respondents cited fruit, vegetables, tofu, lozenges and melon as examples. Amongst beverages, cooling herbal tea, mung bean soup, five flower tea, watercress soup, sweet soup, vegetable soup, cooling herbal tea, chrysanthemum tea, and soya milk was mentioned (Appendix 4.6). Abstinence from "hot" foods, fried foods, cocoa, spicy foods and alcohol was considered an important adjunct in the dietary treatment of "hot" symptoms.

Symptoms of Excess Cold in the Body

Only 57% of respondents were able to identify symptoms arising from excess cold elements in the body, physical manifestations were believed to come in the form of any or all of the following symptoms.

Table 4.19 Symptoms of Excess Cold

Symptoms	Number	% (N=83)*
Cold body temperature	22	27
Diarrhoea	17	21
Cold extremities	10	12
Weakness	9	11
Tiredness	8	10
Dizziness	8	10
Increase urination	7	10
Pallor	6	7
Light wet cough	6	7
Irregular periods	6	7
Abdominal pain	5	6
Loss of appetite	4	5
Runny nose	3	4
Short breath	2	2
Arthritis	2	2
Mucous	2	2
Constipation	1	1
Anaemia	1	1
Vomiting	1	1
Total	120	
* Columns add up to more than 100% because one respondent could give more than one answer		

Respondents considered that the excess coldness may be derived from overconsumption of "cold" and/or "cooling" foods; from exposure to cold environmental conditions; or from disease.

Avoidance by respondents of "cold" foods and raw vegetables were considered important in counteracting excess coldness together with consumption of "warming" foods, soups, tea and herbs like ginger tea, ginseng tea, lychee tea, Tang kuei, moderate amounts of stimulants, ginger, garlic, alcohol, lamb, salt water and coconut milk (Appendix 4.7).

Symptoms Arising From Excess Consumption of "Supplementary" Foods

When asked what manifestations arise as a result of excess consumption of supplementary foods, only 20 (14%) respondents were able to cite a few symptoms which included wet heat, nosebleed, sore throat, headache and hot air. Abstinence from "supplementary" foods like ginseng tea and consumption of plenty of boiled water was believed by these interviewees to be important in treatment.

Symptoms Arising from Excess Consumption of "Poisonous" Foods

An excess of "poisonous" foods was considered by 9 (6%) respondents to be harmful only if a person was ill or recovering from an illness or operation in which case consumption would delay the healing process. Respondents reported that eating excess "poisonous" foods would cause diarrhoea in addition to skin rashes, stomachache, itching and vomiting. Amongst "poisonous" foods to be avoided were crabs and aubergine. Lemon tea was also believed by respondents to have the ability to act as an antidote if excess "poison" was consumed as were rice congee, red date tea, boiled water, coriander, mung bean soup and hair seaweed.

4.6.4 Classification of Foods According to Food Flavours

As detailed in Chapter 3, flavours of foods are believed to exert different effects on the body depending on whether they possessed a salty, sour, pungent, sweet or bitter flavour.

Respondents were asked to classify the same list of foods used for energy categorisation into whether they believed foods possessed a salty, sweet, bitter, pungent or sour flavour (See Appendix 4.8). Surprisingly, interviewees were not able to assign the majority of foods to a specific flavour category. Those foods which were allocated to a category (See Table 4.20) were those which had a definite taste, rather than an inherent flavour. So that for example, ginger, garlic and spring onions were considered pungent, soy sauce salty, and lettuce, celery and pomelo bitter.

Table 4.20 Classification of Foods According to Food Flavours

Food	Number	% (N=145)	Flavour
Ginger	27	19	Pungent
Spring onions	23	16	Pungent
Soy sauce	22	15	Salty
Sweet and sour pork	21	14	Sweet & Sour
Chicken in black bean sauce	16	11	Salty
Beef	10	7	Sweet
Garlic	14	9	Pungent
Lettuce	13	9	Bitter
Celery	11	8	Bitter
Ice cream	11	8	Sweet
Pomelo	12	8	Bitter
Orange	10	7	Sweet

4.6.5 Beliefs About Beneficial Food Flavours for Specific Organs

Classically, different flavours have their respective important effects upon the internal organs. Foods that have a pungent flavour acts on the lungs and large intestine; with a sweet flavour on the stomach and spleen; with a sour flavour on the liver and gallbladder; with a bitter flavour on the heart and small intestine and with a salty flavour on the kidneys and bladder.

Table 4.21 illustrates which of the five flavours respondents believed were beneficial for each internal organ. It can be seen that only very few respondents attempted this question but of those who did, at least half of the interviewees agreed with the classical correspondences.

Table 4.21 Flavours Believed to be Beneficial for Specific Body Organs

Organ	Flavour	Classics
Heart	Sweet (3 - 50%) Bitter (3 - 50%) (N = 6)	Bitter
Lungs	Sweet (1 - 50%) Pungent (1 - 50%) (N = 2)	Pungent
Kidney	Salty (8 - 100%) (N = 8)	Salty
Spleen	Sweet (2 - 100%) (N = 2)	Sweet
Liver	Sour (3 - 75%) Salty (1 - 25%) (N = 4)	Sour
Intestines	Sweet (1 - 50%) Bitter (1 - 50%) (N = 2)	Pungent (large) Bitter (small)
Gallbladder	---	Salty
Stomach	Sweet (3 - 100%) (N = 3)	Sweet
Brain	Sweet (3 - 100%) (N = 3)	---
Bones	---	---
Eye	Sweet (3 - 100%) (N = 3)	---

4.6.6 Effects of Food Flavours on the Body

Salty Flavour

Respondents in this study did not appear to be very familiar with the idea of innate flavours of foods but rather with the actual taste of foods (See section 4.6.4)

In classical texts, foods with a salty flavour have the ability to soften hardness, cool the body, strengthen the bones and viscera, calm the nerves, loosen the bowels and ease pain. None of these effects were mentioned by interviewees.

Table 4.22 Effects of Salty Flavour in the Body

Effects	Number	% (N=94)*
Not good for the blood	33	35
High blood pressure	32	34
Thirst	16	17
Dry throat	10	11
OK in moderation	9	10
Lips peel	7	8
Dry skin	6	6
Stroke	5	5
Cancer	4	4
Drys up secretions	4	4
Cardiac problems	2	2
Good for 'flu and colds	2	2
Total	130	
* Column adds up to > 100% because respondents could give more than one answer		

Instead, respondents believed that excess consumption of salt had deleterious effects on blood pressure (33 - 35%) and related diseases (7 - 8%) like stroke and coronary heart disease. Although none of these effects appear in the classical texts, this is actually one area where one might propose an underlying agreement between western and Chinese medical thinking. According to the classical theory of the Five Phases Correspondences, salt is associated with the kidney and its functioning. This is consistent with the western knowledge that the kidneys are involved in the regulation of blood pressure through the production of hormones.

In moderation, beneficial effects cited by interviewees included the ability of salty foods to dry up secretions (4 - 4%) and hence were useful for influenza and colds (2 - 2%). This suggests that salt has a "warming" effect in contrast to the classical belief of being "cooling" for the body. It could be that the idea of the consumption of salty foods was a round-about way of increasing the fluid intake of patients afflicted with flu or a cold. If this is the case, then it would tie in with western management of the conditions.

Sweet Flavour

As to foods with a sweet flavour, subjects considered excess sweet foods to be the culprit in causing dental caries (21 - 24%), mucous (20 - 23%), coughing (9 - 10%) and vomiting (6 - 7%). If overconsumption of such foods was prolonged obesity (10 - 10%) and diabetes (20 - 23%) would result. In moderation however, sweet foods were conceived to be nourishing (11 - 13%) and energy giving (2 - 2%).

Table 4.23 Effects of Sweet Flavour in the Body

Effects	Number	% (N=87)*
Dental decay	21	24
Diabetes	20	23
Mucous	20	23
"Nourishing"	11	13
Fattening	10	10
Cough	9	10
OK in moderation	8	10
Vomiting	6	7
Gives energy	2	2
Total	107	
*Column adds up to > 100% because respondents could give more than one answer		

Although the classical idea that foods with a sweet flavour were helpful in slowing down acute symptoms and neutralising toxic effects these were not mentioned by any of the respondents interviewed. There seems however, to be a certain connection between effects cited by interviewees and classical medical thinking. According to the Five Phases Correspondences, sweet flavour corresponds with the mouth. The deleterious effects mentioned by the respondents appears to agree with this. Problems with the teeth, mucous, coughing and vomiting are all connected with the orifice in one way or another. This also corresponds with western beliefs about sugar and dental decay.

Pungent (Acrid) Flavour

For foods with a pungent flavour, some respondents were in agreement with the classical concept that they induced perspiration (21 - 25%) and their ability to promote

energy circulation (3 - 4%) in the body. Other effects not mentioned classically but quoted by respondents are illustrated in Table 4.25. Excess consumption were believed to cause similar "hot air" symptoms to those arising from excess heat in the body.

Table 4.24 Effects of Pungent Flavour in the Body

Effects	Number	% (N=84)*
Induces perspiration	21	25
Promotes appetite	16	19
Too much excitement	14	17
"Hot Air" symptoms	9	11
Stimulating	9	11
Burns the stomach	8	10
Gastric ulcer	5	6
Burns tongue	5	6
Not good	4	5
Produces gunge around eyes	4	5
OK in moderation	4	5
Gives energy	3	4
Ill health	2	2
Burns throat	2	2
Stomach pain	1	1
Cancer	1	1
Total	108	
*Column adds up to >100% because respondents could give more than one answer		

Sour Flavour

Only 6 respondents mentioned the classical idea that foods with a sour flavour were useful in checking diarrhoea (i.e. obstructing movements). Consumption of sour foods were reported by subjects to be helpful in aiding digestion (8 - 10%), and making the diet more appetizing (5 - 5%).

Table 4.25 Effects of Sour Flavour in the Body

Effects	Number	% (N=94)*
Bad for the gastrointestinal tract	14	26
Burns stomach	9	10
Bad for the elderly	8	10
Aids digestion	8	10
Hiatus hernia	6	6
Difficult to digest	6	6
Good for diarrhoea	6	6
Makes mouth pucker up	6	6
OK in moderation	6	6
Appetising	5	5
Not good for gastrointestinal problems	5	5
Cancer	4	4
Depends on the body type	4	4
Ill health	3	3
Produces gunge around eyes	3	3
Induces perspiration	1	1
Total	94	
*Column adds up to >100% because respondents could give more than one answer		

The idea that sour foods aided digestion, again agrees with the Five Phases Correspondences. Both the liver and the gallbladder are associated with the sour flavour, according to western knowledge these organs are responsible for producing secretions and enzymes which are needed during the digestion process.

An excess of sour foods was thought to be bad for the gastrointestinal tract (24 - 26%) leading to burning sensations in the stomach (9 - 10%) and produce deleterious effects in the elderly (8 - 10%). 4 (4%) interviewees believed that the extent of symptoms depended on the body type and constitution.

Bitter Flavour

Foods with a bitter flavour were conceived by respondents to aid the dispersal of wetness in the body (14 - 20%), provide vitamins (5 - 7%) as well as being nutritious (8

- 11%). However, some respondents regarded an excess of bitter foods to be too "cooling" for the body (20 - 28%), gradually decreasing the body's resistance which would manifest firstly as diarrhoea (3 - 6%) and eventually ill health (2 - 3%) and cancer (1 - 1%).

Table 4.26 Effects of Bitter Flavour in the Body

Effects	Number	% (N=71)*
"Cools" the body	20	28
Disperses "Wetness"	14	20
Good for the body if it's in medicine	10	14
Nutritious	8	11
Affects tongue	7	11
OK in moderation	6	8
Provides vitamins	5	7
Not good	4	6
Causes diarrhoea	3	6
Causes ill health	2	3
Cancer	1	1
Total	80	
* Column adds up to >100% because respondents could give more than one answer		

If the source of bitterness was derived from medicine then it would be good for the body (10 - 14%). The belief held by respondents that bitter foods were "cooling" for the body seems to contradict the Five Phases Correspondences which associates hotness with this flavour. The idea that bitter foods affects the tongue however, agrees with the traditional correspondence of this flavour with the orifice.

4.7 Putting Theory into Practice

As discussed in chapter 3, a number of factors are traditionally considered to be important in achieving dietary balance and the extent to which respondents took account of the factors was explored. On reporting the findings in each instance the foods which people should eat more of were considered, followed by a discussion of those foods which they felt should be reduced.

4.7.1 Adjustment of Diet According to Age

As people approach old age, the body base is believed to shift towards the colder side of the equilibrium (Tan, 1984). Accordingly, a change in the type of foods eaten should occur. Avoidance of "cold" /"cooling" foods and consumption of "tonic", "supplementary" and "warming" foods is practised. In this study respondents did consider that age was an important factor in deciding what foods to eat or to avoid. Just over a half (74 - 51%) believed that certain foods should be eaten more often when a person approaches old age. Less educated respondents were more likely to believe that the diet should be modified with an increase in age ($p=0.03$). Table 4.27 illustrates examples of foods which respondents would eat more of and their reasons for doing so.

Table 4.27 Examples Of Foods Believed To Be Beneficial For Old Age and Reasons Given For Increasing Consumption

Examples of Foods Eaten More	Reasons
Vegetables, light diet, fruit, rice congee, chicken, easily digested foods, "warming" foods, "nourishing" foods, "tonic foods", well cooked foods, pig's liver, tomatoes, steamed fish, medicinal soups	Easy to digest
Vegetables, light diet, fruit, chicken, "nourishing" foods, "tonic" foods, well cooked foods, pig's liver, eggs, milk, Chinese flowering cabbage, chicken fried with ginger and garlic, steamed fish, pork, fish, meat, white fungus	Good for health
"Warming" foods, "nourishing" foods, "tonic" foods, chestnut, Bird's nest, steamed fish, fish soup	Strengthens the stomach
Vegetables, rice, pig's trotters with vinegar, spinach	Provides vitamins, iron, calcium
Vegetables, chicken, easily digested foods, "nourishing" foods, "tonic" foods, chicken fried with garlic and ginger, steamed fish roe, double-boiled chicken	Nutritious
"Nourishing" foods, "tonic" foods, mutton, milk, fish lips, bird's nest, Chinese flowering cabbage, sea urchin, fish, coconut and chicken soup, double-boiled chicken, white fungus, ginseng	"Nourishing"
"Nourishing" foods, medicinal soups, ginseng, tonic foods	Strengthens the body
Fish head	Good for the mind
Seaweed	Lowers blood pressure

As can be seen from the above table, foods tended to be chosen for easy digestibility, nutrition, strengthening the body and body organs and the general maintenance of good health.

When asked which foods respondents believed to be the most beneficial, vegetables elicited the most response (18 - 25%), followed by tonic foods (17 - 35%), fish (13 - 18%) nourishing foods (12 - 17%), chicken (10 - 14%), and a light diet (11 - 16%) (see Appendix 4.9). The inclusion of vegetables in this list appeared to be a direct contradiction to the traditional view of avoiding "cold" foods in later life. However, when respondents were asked about this, most of them stressed that they actually consumed vegetables that were less "cooling". For example, spring greens were preferred over celery because they were considered to be "cooling" but not "cold". The method of cooking and the inclusion of ingredients like garlic, ginger or even curry powder also had the effect of "warming" vegetables up. In addition, the quantity of vegetables eaten was considered important, consumption of a small amount of vegetables "warmed" up by various means would impart vitamins and promote health without being too "cold" for the body.

Over a half (59% - 86) of interviewees believed that certain types of foods should be avoided in old age to prevent for example, cancer and ill health.

Table 4.28 Examples Of Foods Believed To Be Detrimental For Old Age and Reasons Given For Avoidance

Examples of Foods Eaten Less	Reasons
Pork, beef, fat, salt, oily foods, meat	Leads to cancer
Pork, beef, lard, foods in excess, overstimulating foods, hard to digest foods, excess "cold" foods, salt, alcohol, hard undercooked foods, fried foods	Leads to ill health
Meat, oily foods, cheese, chocolate	Fattening
Oily foods, meat, foods in excess	Stomach has no capacity to absorb
Beef, oily foods, fish, overstimulating foods, red meat, pig's blood, white turnip	Adverse blood reaction
Red meat, meat, fat, salt, overstimulating foods, eggs, chicken liver, chicken kidney, lard	Bad for the heart
Meat, excess "cold" foods, white turnip, coffee, fish, fried foods	Old people have weak blood
Beef, pork, butter, chicken liver, cheese	Too much cholesterol
Meat, red meat, coffee, fat, overstimulating foods	Too stimulating

Informants in the 70 and over age group were more likely to avoid certain foods than younger interviewees ($p < 0.05$). Specifically, food items like meat, oily foods and eggs, salt, offal should be avoided for fear of overstimulation and eventual cardiac problems. Excess "cooling" and "cold" foods like beansprouts, white turnips, and certain vegetables were thought to be difficult foods to digest because old people were believed to have "weak blood". When asked which foods respondents believed to be the most detrimental for health, 23 (26%) respondents considered that elderly people should not consume foods in excess, followed by meat (16 - 23%), oily foods (11 - 16%) overstimulating foods (9 - 13%) and excessively 'cold' foods (9 - 13%) (see Appendix 4.10).

4.7.2 Adjustment of Diet According to Season

Seasonal adjustment of the diet to maintain health was practised by 57% (83) of respondents interviewed. Younger respondents (60-64 years) were surprisingly more likely to adjust their diet according to season than older respondents ($p<0.03$). Maybe older interviewees were more concerned with avoiding certain foods throughout the year than balancing their diet by season. Inclusion of "supplementary" foods like long boiled

chicken, "warming" soups like chicken soup and vegetables during the winter months was believed to be most important by 12% (8) or more of respondents (See Appendix 4.11). These were specifically eaten to keep the body and blood warm, combat diseases as well as being nourishing for the body (See Table 4.29).

Table 4.29 Examples Of Foods Eaten In Winter And Reasons For Consumption

Foods Eaten in Winter	Reasons
"Supplementary" foods, pig's trotters, black beans, "warming" soups, lamb, rabbit, chicken soup, stewed pork with black beans, snake soup, lamb and vegetable soup, ginger, stewed chicken, stewed chicken with mushrooms and chestnuts, yerk choi soup, canned foods, oxtail stew with orange peel, firepot, curry, stewed beef with orange peel, "hot" foods, stewed dishes, small amount of greasy foods, turtle, eel, long boiled mutton	Warms the body and the blood
"Supplementary" foods, pig's stomach, pig's trotters, ginger, lamb, chicken soup, double-boiled chicken, yerk choi soup, canned foods, peanuts	Supplementary
"Nourishing" foods, "supplementary" foods, double boiled chicken, chicken soup	Combats illnesses
"Hot" foods, carrots, vegetables, fruits, oranges, garlic	Keeps colds away
"Warming" soups, chicken soup, bird's nest soup, stewed chicken, taro with belly pork	"Nourishing"
Boiled water	Cleanse system

"Cold" foods such as raw vegetables, fruit, ice-cream and jasmine tea were avoided during the cold weather by some subjects (Appendix 4.12) specifically for fear of cooling the blood, causing diarrhoea and being generally bad for health. There was a trend for shorter stay subjects (< 16 years) and those with poor spoken English to seasonally adjust their diets more often than those who had been resident in the UK for more than 16 years and with good English speaking ability although this was not significant.

Abstinence from "hot" foods during the summer months like meat, durians (a fruit with a prickly appearance, with a succulent pulpy flesh loosely surrounding inner seeds and a very distinctive smell) and greasy foods was considered essential by some

interviewees (Appendix 4.13) for fear of bad health, causing pimples and making the throat too dry (Table 4.30).

Table 4.30 Examples of foods Avoided in the Summer and Reasons for Avoidance

Examples of Foods to Avoid	Reason
Fried foods, dry foods, greasy foods	Gives pimples
Dry foods, greasy foods, meat, "hot" foods	Bad for health
Greasy foods, fried foods, meat	Too oily
Dry foods, fried foods, durians	Too "hot"
Dry foods	Makes throat dry
Meat, excess foods, greasy foods	Difficult to digest

To balance excessive heat in the summer respondents included soups made from sun-dried white cabbage and leaf mustard in the diet as well as consuming sweet soups and pearl barley tea made with rock sugar and sweet soups. Certain foods and soups were believed to have the ability to eliminate poisons from the body and purify the system. Amongst examples cited were Ching Bo Leung soup (cooling herbal soup), white cabbage and shitake mushroom soup, watercress soup and sweet red bean soup. Boiled water was considered by the majority of respondents (78% - 113) to be an essential item throughout the year to cleanse the system.

Table 4.31 Examples of Foods Eaten in the Summer and Reasons For Consumption

Foods Eaten in the Summer	Reasons
Fruits, non greasy foods, water, pearl barley tea with rock sugar, Ching Bo Leung, chrysanthemum tea, red bean soup, ong choi, sugarcane juice, water chestnut, white cabbage and shitake mushroom soup, kale, waterchestnut, mustard green, clear vegetable soup, watercress soup	Eliminates poisons
"Cooling" foods, fruits, summer vegetables, watercress soup, chrysanthemum tea, tofu, coriander and fish soup, sun dried white cabbage soup, mangetout, coconut juice, beancurd and spinach soup, ong choi, sago pudding, sweet potato soup, Chinese chives, wintermelon and salted egg soup, grass jelly, watermelon, clear vegetable soup, mustard green, Chinese vine leaves	"Cooling"
Plain foods, non greasy foods, fruits	Good for health
Fruits, summer vegetables, scrambled eggs and chives, tofu, non greasy foods, beancurd and spinach soup	Easier to digest
Water, sun dried white cabbage soup, sweet soup, pearl barley tea with rock sugar, leaf mustard soup	Cleanses system, purifies and strengthens the liver and lungs
Black tea	Dissolves fat in stomach

The main consensus was to consume plenty of cooling vegetables, fruits, soups and teas, as well as plain, non greasy foods (Appendix 4.14).

4.7.3 Adjustment of Diet According to Constitution

Traditionally, constitution is held as an important factor which influences the food choice of an individual. While all respondents agreed with this idea, 91% (132) were unable to classify their constitution in classical terms. Only 6 respondents described themselves either as active/thin (3) and inactive/fat (3) while 5 considered themselves to be "cold" which is consistent with traditional ideas about body base and 2 simply thought themselves as weak.

Besides balancing their diets in relation to age and season, 23 (16%) respondents reported taking supplements to maintain health as well, interviewees administered multivitamins, vitamin E, Royal Jelly, cod liver oil and ginseng.

Table 4.32 Supplements Taken

Supplements	Number	% (N=23)*
Multivitamins	12	52
Ginseng	6	26
Cod liver oil	3	9
Vitamin E	3	9
Royal Jelly	1	4
Total	23	
* Column adds up to >100% because respondents could give more than one answer		

4.8 Summary

Although there was some acceptance of western concepts of nutrition, informants still tended to incorporate these ideas with traditional cosmology based on energy, rather than accepting one system and totally rejecting the other. The "hot"/"cold", "wet", "poisonous"/"supplementary" categories for classifying foods was still predominant in the minds of respondents. Despite the variation in the valences ascribed to foods, it appears that basic items like rice, red meat and vegetables have so salient a traditional coding (which held across country of origin) that fewer respondents disagreed with tradition. However, those with less well recognised traditional valences were subject to greater differences in coding. For 'newly' introduced and tried items, respondents tended to assign them with other qualities like nutritious or bad for health.

Disagreements in the classification of foods have also been shown in other studies (Foster, 1984; Anderson & Anderson, 1975; Koo, 1984). where variations in classifications of foods were found not only between one geographical area and another but also among members of a single community. Classification of particular foods may well be affected by the characteristics of the respondents, this includes country of origin as well as physical constitution. In this study, there was a difference in the level of respondents agreement with classifications of foods from other studies and their country of origin. Those born in Mainland China were more likely to have a higher index of agreement than interviewees born in Hong Kong or Malaysia. Such factors may have

influenced interviewees to experience "hot"/"warming" effects and others "cooling"/ "cold" from the same food.

In addition, categorisations of foods may also be affected either by 'informed' relatives (doctors, herbalists, traditional practitioners) or by the accepted viewpoints of contemporaries.

Regarding the influence of classical ideas concerning the importance of food flavours and the maintenance of health, it appears from the results that respondents were not at all familiar with the concept of innate flavours but rather with the actual taste of the food. On the basis of taste respondents were able to enumerate their beliefs about the effects of different food flavours on the body.

The persistance of traditional ideas in this study population therefore seems to exist on the 'folk' level. Respondents were much better able to classify foods in hot-cold terms rather than according to innate flavours.

Large numbers of respondents adjusted their diets in relation to season and age by using the basic hot and cold notion to balance opposing elements in their body. So that for example, cold foods were avoided both in old age (cold body base) as well as during the cold winter months.

CHAPTER 5

A STUDY OF THE CHINESE ELDERLY IN LONDON - DISEASE CAUSATION AND MANAGEMENT

CHAPTER 5

CHINESE ELDERLY STUDY - DISEASE CAUSATION AND MANAGEMENT

5.1 Knowledge of Traditional Concepts in Relation to Diseases

Respondents were presented with 21 different ailments and asked to classify them according to whether they believed each condition was caused by an excess of hot/cold/wet/poisonous energy or by insufficient energy circulating in the body. Interviewees were also presented with a don't know or other category.

Appendices 5.1 - 5.20 shows that a variety of different possible causes was given for each of the health problems presented.

The following section describes the concepts held by interviewees in relation to traditional classifications

5.1.1 Concepts of Causation Based on Energy Imbalance and Insufficiency

When each health problem was grouped according to the most popular response (besides don't know), it was found that for 15 out of 21 ailments presented, concepts of aetiology were believed to be related either to energy imbalance or to insufficient energy in the body.

Table 5.1 illustrates respondents' views on the aetiology of diseases.

Table 5.1 Respondents Views on Disease Aetiology Based on Energy Imbalance and Insufficiency

Causation	Number	% (N=145)
Due to Excess "Hot"		
Nosebleed	109	75
Constipation	47	32
Haemorrhoids	43	30
Due to Excess "Cold"		
Cold	60	41
Poor circulation	46	32
Diarrhoea	39	27
Tuberculosis	25	17
Due to Excess "Wet"		
Arthritis/Rheumatism	18	29
Due to Excess "Wind"		
Stroke	39	26
Due to Excess "Poison"		
Gallstones	40	28
Cancer	35	24
Gout	30	21
Liver disease	19	13
Renal disease	19	13
Due to Insufficient Energy		
Anaemia	34	23

It can be seen that nosebleeds brought the greatest agreement from interviewees with 75% (109) believing that excess hot energy was the cause of the ailment.

For commonly experienced ailments other than nosebleeds like constipation, haemorrhoids and poor circulation, the trend was for 30% or more of respondents to classify them in terms of excess hot or cold energy. Whilst for uncommonly experienced diseases like gout, cancer, gallstones, liver and renal disease, the trend was for respondents to attribute the cause to excess poisonous energy circulating in the body.

For some ailments like stroke and arthritis, the Cantonese name actually suggested the causation. Stroke literally translates as "brain caught wind" whilst arthritis translates as "wind wet".

A comparison of the concepts of disease causation obtained in this study and that from folk classifications documented by Koo (1984) illustrates that although respondents classified most diseases in terms of traditional aetiologies there was agreement only for 7 health problems.

Table 5.2 Comparison of Classifications

Health Problem	Folk Classification (Koo, 1984)	Respondents Most Popular Answer
Anaemia	Insufficient energy	Insufficient energy
Constipation	Excess hot	Excess hot
Haemorrhoids	Excess hot	Excess hot
Nosebleeds	Excess hot	Excess hot
Diarrhoea	Excess cold	Excess cold
Poor circulation	Excess cold	Excess cold
Arthritis/ Rheumatism	Excess wet	Excess wet/cold
Cough	Excess hot	Result of flu/cold
Hypertension	Excess hot	Inherited
Stroke	Blocked energy	Excess wind
Tuberculosis	Insufficient energy	Excess cold
Cold	Accumulation of hot-poison	Excess cold
Influenza	Accumulation of hot-poison	Hot-Cold extreme
Diabetes	Insufficient energy	Inherited
Gallstones	Blocked energy	Excess poison
Liver disease	---	Excess poison
Renal disease	---	Excess poison
Gastric/peptic ulcer	---	Irregular meals/eat too fast
Gout	---	Excess poison
Coronary Heart Disease	---	Excess excitement

5.1.2 Concepts of Causation Not Based on Energy Imbalance and Insufficiency

For cough, influenza, diabetes, hypertension, coronary heart disease and gastric ulcer, the main origins of these were most frequently not attributed to energy imbalance

or insufficiency but rather to excesses of another kind, or to other aspects of a person's lifestyle.

Aetiology of gastric ulcer was most popularly thought to be related to the regularity (26 - 18%) and speed with which meals (23 - 16%) were consumed each day. Long term deviation from a set pattern was therefore believed by interviewees to contribute to the development of the disease.

Although heritability was believed by 38 (26%) respondents as causing diabetes and hypertension, a similar number of respondents (34 - 23%) agreed with a commonly held view that excess sugar and salt alone are responsible for the respective development of these two diseases.

Again, genetic predisposition was considered by some respondents to be the major cause of heart disease (14 - 10%), although the most popular causation was attributed to having too much excitement in one's life (30 - 21%). Excitement was believed to encompass excess consumption of stimulating foods as well as excess stress and anger.

Cough was considered as a side effect of colds and 'flu by 29 (20%) informants. Interestingly, whilst colds were considered by 40% of interviewees to result from an excess of cold energy in the body, 'flu was most popularly attributed to an extreme change in environmental temperature i.e. going from a centrally heated place to the outside cold.

5.1.3 Concepts of Causation Related to Chinese and "Western" Ideas

Since a variety of aetiological responses was given for each health problem, it was decided to group them according to whether concepts were related to "Chinese" ideas or "western" ideas. For example, causes attributed to energy imbalance/insufficiency were assigned to the "Chinese" category whilst infection and inheritance were assigned to the "western" category. In some instances, it was not always easy to make a clear cut distinction, since "western" and "Chinese" ideas were in fact congruent. For example, constipation was thought to be attributed to an insufficient intake of fruit and vegetables by some respondents which would fit with the Chinese concept of a "hot" condition, alleviated by "cool"/"cold" foods. However, in this case, it was decided to allocate them to the "western" category since no reference to the humoral system was specifically mentioned.

It can be seen from Table 5.3 that for commonly experienced ailments like colds, flu, nosebleeds, diarrhoea, arthritis and poor circulation, over 50% of respondents

explained their causes in terms of Chinese concepts. Conversely, for less commonly experienced diseases like diabetes, hypertension, coronary heart disease, tuberculosis, gout, liver disease, renal disease and cancer the trend was for 50% or more of respondents to attribute their aetiologies either to "western" causes or the don't know category.

Table 5.3 Concepts of Causation Related to Chinese and Western Ideas

Conditions	Chinese Concepts	Western Concepts	Don't know
Nosebleed	128 (88%)	0 (0%)	17 (12%)
Influenza	125 (86%)	17 (12%)	3 (2%)
Cold	120 (83%)	21 (15%)	4 (3%)
Diarrhoea	116 (80%)	4 (3%)	33 (23%)
Arthritis	98 (68%)	23 (16%)	24 (17%)
Gastric ulcer	91 (63%)	2 (1%)	52 (36%)
Haemorrhoids	84 (58%)	4 (3%)	57 (39%)
Poor circulation	78 (54%)	0 (0%)	67 (46%)
Coronary heart disease	68 (47%)	19 (13%)	58 (40%)
Constipation	64 (44%)	48 (33%)	33 (23%)
Anaemia	62 (43%)	29 (20%)	54 (37%)
Cough	62 (43%)	29 (20%)	54 (37%)
Stroke	58 (40%)	8 (6%)	79 (55%)
Gallstones	43 (30%)	13 (9%)	89 (61%)
Hypertension	43 (30%)	52 (36%)	50 (35%)
Tuberculosis	40 (28%)	17 (12%)	88 (61%)
Cancer	37 (26%)	7 (5%)	101 (70%)
Gout	34 (23%)	11 (8%)	100 (69%)
Liver disease	23 (16%)	11 (8%)	111 (77%)
Renal disease	22 (15%)	0 (0%)	123 (85%)
Diabetes	14 (10%)	85 (59%)	46 (32%)

Statistical analysis showed that interviewees who consciously adjusted their diets to maintain health were significantly more likely to classify constipation ($p=0.02$), poor circulation ($p=0.004$), gallstones ($p=0.0001$) and arthritis ($p=0.006$) in terms of Chinese ideas. Similarly, those respondents who practised seasonal adjustment of their diets were

also more likely to attribute the cause of poor circulation in Chinese terms (p=0.02). In addition, female subjects were significantly more likely to assign the cause of poor circulation in terms of Chinese ideas (p=0.002).

Interestingly, older respondents (those over 70) were more apt to attribute the cause of hypertension in western terms (p=0. 004). It is quite probable that these interviewees had high blood pressure themselves or knew friends or relatives who had the disease and so were better informed via western doctors. The first argument may have some basis because of those respondents who classified hypertension in western terms, 3 did suffer from the condition.

5.2 Dietary Prescriptions for Diseases

When asked how respondents would manage the 21 health problems presented to them for classification, a rich repertoire of disease specific food rules were cited. The different foods cited for treating illness illustrate the application of various traditional Chinese ideas. It can be seen from Appendices 5.1 - 5.20 that for ailments believed to arise from an excess of "hot", "cold", "wet", energy, amelioration was achieved by consuming foods classified in the opposite direction and reducing those of the same nature to avoid exacerbating the imbalance. This was true for ailments like cold, tuberculosis, poor circulation, nosebleeds, arthritis, haemorrhoids, constipation and diarrhoea. For conditions believed to arise from insufficient energy (like anaemia), consumption of certain tonics was thought to remedy the problem.

To see whether these traditional dietary modifications coincided with or contradicted western dietary management, it was decided to look, in more detail, at those health problems for which western dietary advice have been formulated.

5.2.1 Gastrointestinal Disorders

5.2.1.1 Haemorrhoids (Excess hot 43 - 30%, Chinese ideas 84 - 54%)

Grouping the various examples of foods which informants gave to ameliorate/restrict, it can be seen that most of the foods prescribed as being helpful are "cooling" in nature i.e. fruits and vegetables whilst those of the same nature as the ailment are avoided i.e. "hot" and spicy foods. This corresponds well with the traditional dietary management of a "hot" condition.

Table 5.4 Dietary Prescriptions for Haemorrhoids

Ameliorate	Restrict	Western Management
1. Fruits e.g. banana, carambola, dates, figs, persimmons	1. "Hot" foods e.g. beef soup	1. Increase fibre content via cereal and vegetable origin
2. Vegetables e.g. celery, spinach, taro, wax gourd	2. "Poisonous" foods	2. Increase fluid intake
3. "Cooling" foods	3. "Supplementary" foods	
4. Plain foods e.g. rice	4. Spicy foods	
5. Meat		
6. Fish		
7. Black fungus		

Although 54% (84) of respondents attributed the cause of haemorrhoids in terms of Chinese ideas, the type of foods recommended does appear to coincide with those used in western management of the disease i.e. dietary treatment involves an increase in the intake of dietary fibre both cereal and vegetable origin as well as increasing fluid intake.

5.2.1.2 Constipation (Excess hot 47 - 32%, Chinese ideas 64 - 44%)

Similarly, for constipation, it can be seen from the following table that most of the foods recommended are cooling or cold in nature i.e. fruits and vegetables whilst those of the opposite nature are avoided. This again corresponds with the idea that a cooling/cold food should be eaten for a hot condition whilst restricting foods of the same nature simultaneously.

Table 5.5 Dietary Prescriptions for Constipation

Ameliorate	Restrict	Western Management
1. Fruits e. g. apricots, banana, figs, orange, papaya, persimmon, rhubarb, tomato	1. "Hot" foods	1. Increase fibre intake (vegetable and cereal origin)
2. Vegetables e. g. carrots, Chinese cabbage, chives, watercress	2. Stimulating foods	2. Increase fluid intake
3. Fluid e. g. water, herbal tea, milk, orange juice, salt water, slimmers tea, black sesame soup, watercress soup	3. Spicy or pungent foods	
4. Pulses/legumes/ nuts/seeds e. g. castor bean, coconut, sunflower seed, walnut	4. "Wet" foods	
5. Plain foods	5. Snacks	
6. Tonic wine		
7. Meat e.g. pork		
8. Fibre cereals		
9. Sugarcane, white fungus		

Although 44% (64) of the informants classified constipation in terms of Chinese ideas, the above table illustrates congruence with western dietary management i.e. increase in fibre intake via increasing fruit, vegetables, pulses, legumes, nuts and cereals and increasing fluid intake.

Interestingly, milk was suggested as being helpful for constipation probably because of its laxative effect on people who do not secrete lactase the enzyme responsible for breaking down the milk sugar lactose.

5.2.1.3 Gastric Ulcer (Irregular meals 26 - 18%, eat too fast 23 - 16%, Chinese ideas 91 - 63%)

Although gastric ulcer has been most popularly explained in terms of Chinese ideas, it can be seen that there is a striking similarity between the types of foods recommended by informants and that by western advice.

Table 5.6 Dietary Prescriptions for Gastric Ulcer

Ameliorate	Restrict	Western Management
1. Easily digested foods e.g. rice congee, soft noodles, soft rice, tofu	1. Sweet foods	1. Regular meals
2. Plain foods	2. Sour foods	2. Strong tea and coffee in moderation
3. Milk	3. Spicy foods	3. Any food known to cause dyspepsia
4. Soybean oil	4. Pungent foods	4. Alcohol and aspirin
5. Oysters, cuttlefish	5. Hard foods e.g hard rice	5. Smoking must be stopped
	6. "Cold" foods e.g. crabs	
	7. Stimulating foods e. g. coffee	

For example, sweet, sour, pungent and spicy foods have been known to cause dyspepsia in certain people whereas plain and easily digested foods (soft rice, congee etc.) are much less likely to have this effect on acid production.

5.2.1.4 Diarrhoea (Excess cold 39 - 27%, Chinese ideas 116 - 80%)

The majority view for management of "cold" diarrhoea was to increase fluid intake and eat plain foods whilst avoiding foods classified in the same as well as opposite nature of the ailment. This appears to correspond quite well with the western management of the condition, i.e. to increase fluid intake to replace electrolyte loss and eat plain foods to allow the stomach to settle before gradually reintroducing other foods.

Table 5.7 Dietary Prescriptions for Diarrhoea

Ameliorate	Restrict	Western Management
1. Plain foods e.g. bread, noodles in soup, glutinous rice, rice congee, rice noodles in soup,	1. "Cold" foods	1. Increase fluid intake to replace mineral loss
2. Fluids e.g. barley tea, clear soup, congee water, guava tea	2. "Hot" foods e.g. meat, fatty meat	
3. Sour foods e.g. sour plums	3. "Wet" foods	
4. Fruits e.g. persimmon, pineapple, pomegranate	4. Nuts e.g. coconut	
5. Vegetables e.g. carrots, leeks, lotus flower		
6. "Warming" foods e.g. ginger		
7. Certain spices e.g. cinnamon		
8. Medications e.g. Bo chai pills, kaolin morphine		

5.2.2 Blood Disorders

5.2.2.1 Anaemia (Insufficient energy 34 - 23%, Chinese ideas 62 - 43%)

Looking at the foods prescribed for anaemia, it can be seen that all of the foods recommended are good sources of iron, folate, and Vitamin B12. Even though anaemia has been popularly attributed to having a Chinese type aetiology, the foods prescribed by respondents corresponds well with the western dietary management of the condition.

Table 5.8 Dietary Prescriptions for Anaemia

Ameliorate	Restrict	Western Management
1. "Hot" foods e.g. meat, lamb, beef	1. "Cooling" foods	1. Increase iron containing foods
2. Dried fruits e.g. dried apricot, red dates	2. Stimulating foods e.g. coffee tea	2. Increase Vitamin C
3. "Supplementary" foods e.g. Tang kuei, tonic wine, white fungus	3. Snacks	3. Increase folate
4. Offal e.g. pig;s liver		4. Increase Vitamin B12
5. Green vegetables e.g. spinach		5. Increase green vegetables
6. Blood e.g. chicken blood		6. Increase meat
7. Pulses/Seeds e.g. black beans, red beans, lotus seed		7. Increase offal e.g. liver
8. Dried ingredients e.g. cuttlefish, dried oysters, shitake mushrooms		8. Increase pulses legumes e.g. soya beans, nuts
9. Fruits e.g. longan		9. Increase fruit e.g. peaches, prunes, dried apricots, raisins
10. Soups e.g. pig's liver, spinach, lamb, beef		

These dietary prescriptions also illustrate the Chinese principle of 'like helps like'. Eating blood helps anaemia as does eating foods with the same (red) colour e.g. red dates, red beans. Also the consumption of supplementary foods are believed to be essential for diseases arising from insufficient energy. Within these Chinese ideas, there may however be an internal conflict. Several respondents mentioned that materia medica like herbs (ginseng, Tang Kuei) must not be accompanied by "cool"/"cold" foods, physically cold foods (like raw fruits and vegetables, ice-cream), sugar and excess foods for 2 days after consumption otherwise any beneficial effects derived would be entirely lost. The only allowable foods during this period are rice and meat. This of course

means that "cooling" foods even when cooked with warming ingredients have to be avoided when herbs are taken.

5.2.3 Cardiovascular Disorders

5.2.3.1 Hypertension (Inherited 38 - 26%, western ideas 52 - 36%)

Respondents most popularly described the cause of hypertension in terms of western ideas. The types of foods recommended for restriction and amelioration corresponds well with western dietary management of the condition. For example, most respondents knew that salt and salted foods had to be avoided and fruits (especially bananas known to have a high potassium content) and vegetables increased. This awareness may be partly explained by the fact that 3 respondents actually suffered from the condition. It may also be that informants had relatives or friends with hypertension and so were more aware of the sort of foods which were good/bad in this context.

Table 5.9 Dietary Prescriptions for Hypertension

Ameliorate	Restrict	Western Management
1. Neutral foods	1. Salt	1. Decrease salt intake
2. Fruits e.g. banana, persimmon,watermelon	2. Stimulating foods e.g. coffee, alcohol	1a. Reduce meat and meat products
3. Vegetables e.g. bitter gourd, celery, lotus root	3. "Hot" foods e.g. fatty foods	1b. Reduce fish and fish products
4. Cooling foods e.g. duck, jellyfish	4. Salted foods e.g. salted eggs, fish and shrimp paste	1c. Avoid dairy products
5. Pulses/legumes e.g. mung bean soup, broad bean		1d. Avoid tinned vegetables
6. Herbs e.g. do jung		1d. Avoid tinned, packet, bottled sauces and soup
7. Tonic foods		1e. Avoid crisps, snacks, stock cubes, yeast extract
8. Hair seaweed and pork soup, pigs trotter and vinegar		2. Increase fruit and vegetables
		3. If overweight, use weight reducing regimen
		4. Ensure sufficient calcium intake

Even though hypertension was most popularly explained in western terms, respondents were still apt to include Chinese dietary recommendations for the disease like hair seaweed, pig's trotters and vinegar.

5.2.3.2 Coronary Heart Disease (Excess excitement 30 - 21%, Chinese ideas 68 - 47%)

Although the cause of coronary heart disease was most popularly explained in terms of Chinese ideas, there appears to be congruence between informants dietary prescriptions and that of COMA's recommendations i.e. decrease fat intake via a decrease in fatty foods like Chinese sausage and fried foods and decrease alcohol intake.

Concurrently, respondents also suggested an increase in fibre intake via fruit and vegetables.

Table 5.10 Dietary Prescriptions for Coronary Heart Disease

Ameliorate	Restrict	Western Management
1. Plain foods	1. Stimulating foods e.g. coffee	1. Salt restriction
2. Vegetables	2. Fatty foods e.g. Chinese sausage, fried foods	2. Energy restriction for overweight
3. Fruit	3. Excess foods e.g. rice	3. Decrease fat
4. Fish	4. Alcohol	4. Decrease alcohol
5. Pig's heart	5. Smoking	5. + COMA and NACNE guidelines

The recommendation of pig's heart for heart disease based on the principle of 'like helps like' may cause a conflict with western management however, since offal have a high cholesterol content and are generally not recommended for patients with heart disease.

5.2.4 Metabolic Disorders

5.2.4.1 Diabetes (Inherited 38 - 26%/Excess sugar 34 - 23%, Western ideas 85 - 59%)

Although over a half of respondents classified diabetes in terms of western ideas, it can be seen from the above Table 5.11 that recommended amelioration included various Chinese examples of herbs and traditional foods which have been used over the years as 'standard' medicinal foods for diabetics for example, tonic foods, herbs like ginseng and red berry, pork pancreas, bitter melon and beancurd (see chapter 6).

Table 5.11 Dietary Prescriptions for Diabetes

Ameliorate	Restrict	Western Management
1. Tonic foods	1. Sugar	1. Decrease fat
2. Herbs e.g. red berry, ginseng	2. Cakes, biscuits and sweets	2. Decrease sugar
3. "Neutral" foods e.g. yam, tofu	3. Rice	3. Increase fibre rich carbohydrate foods e.g. wholemeal bread, wholegrain cereals, pulses, potatoes
4. Vegetables e.g. bitter melon, celery, corn, kohlrabi, pumpkins, red dates, spinach, string beans, waterchestnut	4. Fatty foods	
5. Fruits e.g crab apple, plum, tomatoes	5. Excess foods	
6. Meat e.g. beef, pork,	6. Bananas	
7. Offal e.g. lamb's kidney, pig's liver, pork pancreas, raw liver		
8. Coconut milk and milk		

There appears to be congruence between western dietary treatment and respondents prescriptions in that there is a recommended increase in the fibre intake via vegetables and fruits. Although however, they are not the same sources recommended by the British Diabetic Association (BDA). In addition respondents have included sugar and other sugary sources in the restricted list together with a reduction in fatty foods and also processed carbohydrate foods in the form of rice.

5.2.4.2 Gout (Excess poison 30 - 21%, don't know 100 - 69%)

Although respondents attributed the cause of gout in terms of having excess poisonous energy in the body, some of their dietary recommendations corresponds quite well with western management i.e. decrease offal (rich in purines), increase fluid intake via red bean and snake soup, decrease alcoholic intake via a decrease in wine.

Table 5.12 Dietary Prescriptions for Gout

Ameliorate	Restrict	Western Management
1. Rice	1. Meat	1. Decrease excess alcohol
2. Red bean soup	2. Offal e.g. liver, kidney	2. Avoid foods rich in purines e. g. anchovies, fish roes, liver, kidney, meat extracts, sardines, sweetbreads
3. Snake soup	3. Wine	3. Increase fluid intake
		4. Dietary restriction if overweight

The recommended intake of snake soup illustrate the Chinese principle of 'using poison to fight poison'. Animals with scales like snakes and scorpions are believed to have antipoison effects.

5.2.5 Hepatic and Biliary Disorders

5.2.5.1 Liver disease (Excess poison 19 - 13%, Don't know 111 - 77%)

A large majority of respondents were unable to classify this disease but for those who did, the majority believed liver disease resulted from excess poisonous energy in the body. The few recommended foods did not appear to contradict western dietary management.

Table 5.13 Dietary Prescriptions for Liver Disease

Ameliorate	Restrict	Western Management
1. Fruits e.g. Japanese pear, muskmelon, plum	1. Alcohol	1. Restrict fat intake, decrease fried foods
2. Honey	2. Smoking	2. Decrease foods likely to cause dyspepsia
3. Pig liver soup		3. High protein diet after convalescence
		4. Sufficient fruit and vegetables
		5. Milk

The recommended pig's liver soup again exemplified the widely believed principle of 'like helps like' and organ therapy.

5.2.5.2 Gallstones (Excess poison 40 - 28%, Don't know 89 - 61%)

Although the majority of respondents who classified this disease believed it resulted from excess poisonous energy in the body, their recommended foods corresponds quite well with western dietary management of the condition.

Table 5.14 Dietary Prescriptions for Gallstones

Restrict	Western Management
1. Meat	1. Clear soups
2. Fatty foods	2. Beef tea
	3. Fruit juices
	4. Milk
	5. Decrease fatty meats
	6. Decrease fried foods

5.2.6 Renal Disorders

5.2.6.1 Renal Disease (Excess poison 19 - 13%, Don't know 123 - 85%)

A large majority were unable to attribute a specific cause for renal disease, but for those who did, excess poison was popularly believed to contribute to its aetiology.

Table 5.15 Dietary Prescriptions for Renal Disease

Ameliorate	Western Management
1. Fruit e.g. dates, watermelon	1. Restrict fluid intake
2. Offal e.g. kidney	2. Restrict sodium intake
3. Vegetable e.g. sweet potato	3. Restrict protein if blood urea is high
4. Black sesame soup	

The recommended foods demonstrates quite well the traditional management of the disease i.e. kidney helps kidney whilst black sesame soup also benefits the organ

because of the association of the colour black with the kidney (Five Phases Correspondences).

From the foregoing account, it appears that the most of the respondents' dietary prescriptions for conditions were congruent with western dietary management. The importance of food in the treatment of disease seems to be ingrained in the Chinese culture such that even for conditions with no formulated western dietary treatment, interviewees were content to give dietary prescriptions for them. This was true for coughs, colds, influenza, poor circulation, arthritis, nosebleeds, tuberculosis and stroke (Appendix 5.13 -5.20). Treatment of such diseases were mostly based on correcting energy imbalance in the body such that "cold" foods were avoided for 'cold' conditions like colds, tuberculosis and arthritis. However, within these dietary prescriptions, there seemed to be a disagreement between respondents on the treatment of colds. Whereas some interviewees recommended an increase in the intake of "hot" and "warming" foods, others advocated a decrease in oily foods and meat generally considered as being "hot".

5.3 Putting Theory into Practice

Although quite a large variety of dietary prescriptions were recommended by respondents for the treatment of the different health problems, in practice, this advice was often not carried out (See Table 5.16).

This was expected for those diseases not frequently encountered or experienced in everyday life (Coronary heart disease, diabetes, hypertension, gastric ulcer, cancer, gout, gallstones, renal and liver disease, tuberculosis and gout) but surprisingly, it was also the case for some commonly encountered ailments like poor circulation and nosebleeds.

Table 5.16 Dietary Prescriptions for Conditions - Theory or Practice

Condition	Ameliorate			Restriction		
	Theory	Practice	N	Theory	Practice	N
Coronary heart disease	100% (11)	0% (0)	11	100% (17)	0% (0)	17
Diabetes	91% (32)	9% (3)	33	97% (36)	3% (1)	37
Hypertension	72% (23)	28% (9)	34	83% (20)	17% (4)	24
Gastric ulcer	94% (16)	6% (1)	17	94% (15)	6% (1)	16
Gout	80% (4)	20% (1)	5	67% (6)	33% (3)	9
Gallstones	---	---	--	83% (5)	17% (1)	6
Renal disease	75% (6)	25% (2)	8	---	---	--
Liver disease	50% (1)	50% (1)	2	100% (6)	0% (0)	6
Tuberculosis	88% (7)	13% (1)	8	100% (3)	0% (0)	3
Stroke	---	---	--	100% (2)	0% (0)	2
Arthritis	65% (30)	35% (16)	46	44% (10)	57% (13)	23
Anaemia	41% (35)	59% (51)	86	67% (4)	33% (2)	6
Constipation	10% (8)	43% (75)	83	25% (3)	75% (9)	12
Diarrhoea	2% (2)	98% (79)	81	3% (1)	97% (32)	33
Haemorrhoids	21% (8)	80% (31)	39	42% (13)	58% (18)	31
Poor circulation	62% (18)	38% (11)	29	---	---	--
Nosebleeds	57% (4)	43% (3)	7	16% (5)	84% (7)	12
Influenza	2% (1)	98% (53)	54	13% (1)	88% (7)	8
Cough	1% (1)	99% (70)	71	7% (3)	93% (42)	45
Cold	0% (0)	100% (89)	89	10% (2)	90% (17)	19

5.4 Process of Seeking Help

Details of the ways in which respondents would seek help for different conditions are given in Table 5.17.

Table 5.17 Most Common Responses for Seeking Help

Condition	1st Choice	2nd Choice	3rd Choice
Cold	Self medicate	Self medicate	GP
Influenza	Self medicate	Diet/GP	---
Nosebleed	Nothing	---	---
Constipation	Diet	Self medicate	Diet
Diarrhoea	Diet	Diet	GP
Poor circulation	GP	GP	Self medicate
Cough	Self medicate	GP	---
Haemorrhoids	Self medicate	Diet	GP/Self medicate
Anaemia	GP	Self medicate/Diet	Self medicate
Tuberculosis	GP	Self medicate	Chinese doctor
Arthritis	GP	Self medicate	Chinese doctor
Gout	GP	Self medicate	Chinese doctor
Gallstones	GP	Self medicate	Chinese doctor
Diabetes	GP	Self medicate	Chinese doctor
Hypertension	GP	Self medicate	Chinese doctor
Gastric ulcer	GP	Self medicate	Chinese doctor
Liver disease	GP	Self medicate	Chinese doctor
Renal disease	GP	Self medicate	Chinese doctor
Stroke	GP	Self medicate	Chinese doctor
Coronary Heart Disease	GP	Self medicate	Chinese doctor

5.4.1 First Choice of Treatment

The majority of informants were convinced of the efficacy of western medical treatment (i. e. visit to a General Practitioner/casualty department) even for diseases whose aetiologies were attributed in terms of Chinese concepts. This was true for poor circulation, anaemia and coronary heart disease. For life threatening and other less commonly experienced diseases (those that elicited a large don't know response), the first

choice of treatment was also western in origin. This was the case for diabetes, hypertension, renal and liver disease, cancer, gout, gallstones, tuberculosis and stroke.

Self medication and dietary remedies were considered as the first choice of treatment for the more commonly experienced ailments like constipation, diarrhoea, cold, 'flu, cough and haemorrhoids. Self medication encompassed either western proprietary medicine and/or Chinese medications (ointments and herbal remedies).

5.4.2 Second Choice of Treatment

For the less commonly experienced diseases and life threatening diseases, self medication was considered as either an important adjunct or second choice of treatment for the majority of respondents interviewed. This was true for tuberculosis, arthritis, gout, gallstones, diabetes, hypertension, gastric ulcer, liver disease, renal disease, cancer, stroke and coronary heart disease.

The use of specific foods was considered by the majority of respondents to be important for only 3 ailments - constipation, diarrhoea, haemorrhoids.

Self medication in conjunction with dietary modifications was believed to be equally important as a second choice of treatment for anaemia. Whilst dietary remedies and/or a visit to the GP was considered for 'flu.

A visit to the GP was however considered essential by the majority of informants if self medication had failed first time round, this was true coughs.

5.4.3 Third Choice of Treatment

Only if western or dietary treatment was believed to be ineffective over a period of time, or if the condition worsened would most of the respondents seek advice from Chinese traditional practitioners (including acupuncturists). This was primarily to avoid both the bother and expense of consultation and travelling fees.

5.5 Summary

Assignment of causation to the 21 different health problems evoked a variety of responses from informants in this study. Ailments more likely to cause temporary discomfort and those more frequently encountered in everyday life were less apt to elicit a don't know response than life threatening and less commonly experienced diseases. In fact, frequently encountered ailments were more likely to receive a traditional Chinese

classification. Out of the 21 problems presented, 12 received such a classification, only 2 were more popularly explained in terms of western ideas.

It is interesting to note that comparison of the aetiologies obtained in this study and that of a recent survey of younger Chinese informants in Hong Kong (Koo, 1987) produced quite contrasting results (see table 5.18).

Amongst the younger respondents in Hong Kong, even for commonly experienced ailments like constipation and diarrhoea, the trend was for interviewees to attribute the cause in western terms as was also the case for life threatening diseases like stroke.

Table 5.18 Comparison of Majority Responses with Koo's Study (1987)

Health Problem	Koo, 1987	This study
Nosebleed	---	Excess hot
Influenza	Catching a cold wind	Hot-Cold extreme
Cold	Catching a cold wind	Excess cold
Diarrhoea	Poor food hygiene	Excess cold
Arthritis	Ageing process	Excess cold and wet
Gastric ulcer	Excess consumption of hard to digest and/irritating food	Irregular meals/eat too fast
Haemorrhoids	Excess hot	Excess hot
Poor circulation	---	Excess cold
Coronary heart disease	---	Excess excitement
Constipation	Gastro dysfunction, improper digestion	Excess hot
Anaemia	Undernutrition	Insufficient energy
Cough	Result of cold/flu	Result of cold/flu
Stroke	Hypertension	Excess wind
Gallstones	Residues from chronic consumption of foods contaminated with and/dirt	Excess poison
Hypertension	Ageing process	Inherited
Tuberculosis	Contagious disease	Excess cold
Gout	--	Excess poison
Liver disease	Eating contaminated foods especially seafoods	Excess poison
Renal disease	---	Excess poison
Pain	---	Excess poison
Diabetes	Eating too much sugar	Inherited

With regard to beliefs concerning the choice of treatment of problems, there was a lack of congruence between the choice of medical system and beliefs related to causation. Theoretically, it might be expected that health problems explained by a Chinese aetiology would be treated in a more traditional way either by foods or by consulting with a Chinese doctor. This was not found to be the case in this study however, for 14 out of the 21 conditions, the first choice of treatment was to visit a GP

or a hospital casualty department, this was true even for conditions attributed in Chinese terms (Appendix 5.21).

These results are however, in agreement with those from a study of younger informants conducted by Lee (1980) in Hong Kong as shown in the following table which compares some of the diseases common in both studies.

Table 5.19 Comparison of Choice of Treatment for Some Conditions

Conditions	Most Popular Choice of Treatment	
	Lee (1980)	This Study
Tuberculosis	Western	GP
Coronary heart disease	Western	GP
Diarrhoea	Western	Diet
Anaemia	Western	Western
Arthritis/Rheumatism	Chinese	Western

83% of the informants in Lee's study said that they visited a western doctor more often and 68% of the same informants reported that their parents (similar age group to the elderly in this study) also visited a western doctor more often.

This apparent lack of congruity may be explained partly by the fact that most people want rapid relief from their symptoms and since dietary treatment and other traditional remedies aim to treat the root of the problem, it may take rather longer before symptomatic relief and eventual health is restored.

Overall, the elderly demonstrated that a core of traditional ideas persisted in relation to diet, health and disease which was centred primarily on a belief in the heating/cooling effects of foods. In addition, supplementary or poisonous properties were also attributed to some foods. Western ideas about specific nutrients, causation of disease and therapy were being slectively incorporated into the health belief system, in part response to their experience of contact with western health care.

CHAPTER 6

A STUDY OF DIABETIC CHINESE PATIENTS

CHAPTER 6
A STUDY OF DIABETIC CHINESE PATIENTS

Introduction

The prevalence of diabetes mellitus has been found to increase with age (Davidson, 1979). In Hong Kong Chinese, it has been estimated to be 3% in the over 40 years age group (Litoujue, 1980), 9.8% in the over 60's (Woo et al, 1987), rising to 17.1% in those over 75 (Woo et al, 1987). It is probable that as the present age structure of the Chinese population in the UK changes, diabetes may become an increasing problem.

For this reason, it seemed to provide a suitable condition in which to examine the influence or persistence of any traditional ideas on disease management and interaction with the health services in Britain.

The following section describes the traditional views concerning the aetiology and management of the disease.

6.1 Background

In China, a condition resembling diabetes ("Hsiao Kho") was first mentioned in the *Huang Ti Nei Ching Su Wen* (Yellow Emperor's Classic of Internal Medicine; Plain Questions (Veith, 1972)) which dates from 2nd Century B.C.. The causes of which was described in the following statement:

> a patient suffering from this disease must have been in the habit of eating many sweet delicacies and fatty foods. Fatty foods make it difficult for the internal heat to disperse, while very sweet things give rise to obesity. Therefore, the ch'i (pneuma) tends to overflow and thus causes hsiao kho."

As far as is known, Chen Chuan (AD 142-220) was the first Chinese physician to discuss the sweetness of urine in hsiao kho. In his book, 'Ku Chin Lu Yen Fang' (Old and New Tried and Tested Prescriptions)(Needham, 1970) he describes three forms of the disease.

1. **'Hsiao Kho Ping'**. The patient suffers from intense thirst, drinks copiously, and excretes a large volume of urine. The latter was said to contain flakes resembling rolled wheat bran, no fat and was sweet in taste.
2. **'Hsiao Chung Ping'**. This form afflicted patients in a different way. Those with the disease tended to eat large amounts of food, have little thirst even though urine (contains fat) is passed frequently but in less quantity.
3. **'Shen Hsiao Ping'**. The patient although thirsty cannotdrink enough to quench his thirst. Swelling is found in the lower extremities. Concurrently, there is wasting of feet, impotence and frequent urination.

From the 8th century onwards, there was mention of tasting the urine in diagnosis but also of watching whether bees would visit a sample of it and whether ants would be attracted to it when a sample was placed near a nest (Lu, 1986).

Before the end of the 17th century, a monograph devoted entirely to hsiao kho was written by Li Hsuan (Lu & Needham, 1970). In it he says that people afflicted with the illness should renounce wine, sex and eating salted starchy cereal products if a cure is sought. However, if boils or carbuncles developed near joints then the prognosis was said to be poor. He also believed that 'hsiao kho' was due to eremosis (weakness of the renal and urinogenital system). Cereal foods were blamed as precursors to the sweetness in urine. Just as in brewing beer, fermentation of cereals converts starch into sugar (then alcohol) the same was thought to occur in the body producing sugar which overflows into the urine. Since the renal and urinogenital systems are eremotic (weak and cold) they cannot absorb nutrient essentials i. e. sugar and fat, so all are excreted in the urine.

Needham (1970) suggests that Hsiao Kho Ping is probably diabetes mellitus and the second, Hsiao Chung Ping, probably the polyphagic form of the disease associated with lipuria. The third form Shen Hsiao Ping since it includes oedema, wasting of feet and impotence, which tends to suggest that Chen Chhuan was probably describing symptoms from another disease possibly nephritis or Bright's disease instead of diabetes.

Nowadays, although diabetes may be generally referred to as *Thang Niao Ping* ("sugar in the urine disease"), diabetes is still considered as being made up of three forms. Classified into Upper, Middle and Lower diabetes (Kaptchuk, 1985) each corresponds to a differing emphasis on one of the 3 main symptoms - thirst, hunger, and excessive urination but all associated with deficient yin energy in the lung, stomach and kidney fires.

Table 6.1 Diagnosis of the Three Forms of Diabetes in Chinese Medicine

Pattern	Diabetes	Tongue	Pulse
Lung Fire Upper Diabetes	Great thirst, drinking large quantities of water: dry mouth	Red material Yellow moss	Floating + Rapid
Stomach Fire Upper Diabetes	Large appetite, excessive eating; thinness and constipation	Red material Yellow moss	Rapid
Kidney Fire Lower Diabetes	Frequent, copious urination (as if greasy), weight loss, progressive dizziness, sore back sometimes accompanied by ulceration on skin or itching; vaginal itching	Red material	Sinking, Thin + Rapid
Source: Kaptchuk, 1985			

It is interesting to note that in neither ancient nor recent accounts of the condition in traditional Chinese medicine is there a distinction or even reference to diabetes insipidus.

6.1.1 Chinese Traditional Management of Diabetes

Traditional management of diabetes has involved the use of foods, medicinal plants as well as adopting other lifestyle changes.

Table 6.2 illustrates examples of different herbs and foods which have been used over the centuries to treat diabetes. It can be seen that the majority of herbs and foods possess a "neutral"/"cool" energy and a sweet/pungent flavour. Since a pungent flavour (as well as "cool" energy) is traditionally considered to pertain to yin, its role in the body is therefore thought to replenish the deficiency of yin energy which is thought to cause diabetes.

Table 6.2 Foods and Herbs Used to Treat Diabetes

Medicinal Herbs and Foods	Energy	Flavour
Radix puerariae (Pueraria root)	Cool	Sweet & Pungent
Fructus lycii (Wolfberry fruit)	Neutral	Sweet
Stigma maydis (Corn stigma)	Neutral	Sweet
Radix ginseng (Ginseng root)	Neutral	Sweet
Wu-Ling Powder		
Rhizoma alismatis (Water plantain tuber)	Neutral	Sweet
Polyporus umbellatus (Umbellate porefungus)	Neutral	Sweet
Poria (Poria)	Neutral	Sweet
Rhizoma atractylodis Macrocephalae (White atractylodes rhizome)	Warm	Sweet & Bitter
Ramulus cinnamoni (cassia twig)	Warm	Sweet & Pungent
Pills of Eight Ingredients		
Radix rehmanniae (rehmannia root)	Cold	Sweet & Bitter
Fructus corni (Dogwood fruit)	Warm	Sweet
Rhizome discoreae Hypoglaucae (Yam rhizome)	Warm	Sweet
Rhizome alismatis (Water plantain tuber)	Cold	Sweet
Poria (Poria)	Neutral	Sweet
Pork Pancreas	Neutral	Sweet
Bitter Melon	Cool	Bitter
Mares Milk	Cool	Sweet
Wheatbran (*Exocarpium Fructi Tritici*)	---	---
Oyster shell (*Conchaostreae*)	---	---
Flesh of Clam	---	---

Source: Compiled from Jingfeng, 1988; Zhang, 1990

The use of pork pancreas to treat diabetes was recommended as early as 752 by Wang Shou who published the remedy in his book entitled "A Collection of Diseases" (Lu, 1986). As well as representing sympathetic medicine, this treatment can also be seen as being similar to modern treatment by insulin, the hormone secreted by the beta cells of the Islets of Langerhans of the pancreas.

As mentioned in Chapter 3, there are many varieties of medicinal foods which are considered particularly useful in Chinese traditional diet therapy including porridge, thick soups, drinks, dishes, decoctions and juices. Examples of recipes for all 6 types have been mentioned in Chinese medical texts for treatment of diabetes and alleviation of symptoms.

1) **Porridge** made from Reed Rhizome (*Rhizoma Phragmitis Recens*); Sea Cucumber (*Stichopus japonicus*); Lucid Asparagus (*Radix Asparagi*); and Chinese yam (*Rhizoma Discoreae*) and Longan (*Arillus Longan*)
2) **Thick Soups** made from Chinese *Trichosanthes* Root (*Radix Trichosanthis*) and Wax Gourd (*Fructus Benincasae*); and Pork Skin
3) **Drinks** made from five juices: pear (*Malum Piri*), waterchestnut (*Bulbus Heleocharis Tuberosae*), reed rhizome (*Rhizoma Phragmitis Recen*), lilyturf root (*Radix Ophiopognis*), lotus root (*Rhizoma Nelumbinis*)
4) **Dishes** including eggs stewed with *Schisandra* fruit (*Frutus Schisandrae*)
5) **Decoctions** made from *Sarcocarp* of dogwood fruit (*Fructus Corni*); corn stigma (*Stigma Maydis*); pork pancreas with Job's tears (*Semen Coicis*), *astragalus* root (*Radix Astragali seu Hedysari*) and Chinese yam (*Rhizoma Dioscoreae*)
6) **Juices** made from mulberry (*Fructus Mori*); and snow pear (*Pyrus nivalis*)

6.1.2 Western Management of Diabetes

The diet recommended to the diabetic patient has until recently differed markedly from that of the general population. In 1982, the British Diabetic Association (BDA) published the following recommendations:-

BDA Recommendations in Brief

1. Effective long term diabetic control depends on the intake not exceeding energy requirement. Since individual energy requirements can differ widely from the 'average', energy requirement cannot be determined from tables quoting average energy needs. Energy intake should therefore be individualised and based on the patient's usual energy intake

2. More complex carbohydrates to be included in the diet. Half or more of the energy content of the diet should be obtained from slowly absorbed, fibre-rich carbohydrate foods (wholemeal bread, wholegrain cereals, pulses and potatoes)
3. Total fat intake should be reduced to about 35% of the total energy intake. This should be achieved primarily by a reduction in the saturated fat content of the diet e.g. less fat from animal sources
4. Distribution and timing of carbohydrate must be balanced
5. High fibre/low fat diet effective for weight loss
6. Diabetics should not be prescribed a diet which contains more sodium than that consumed by a non-diabetic
7. Alcohol in modest amounts are acceptable unless medically contradindicated
8. Specialist diabetic products are often unnecessary and open to misuse
9. Dietary advice for diabetics should be individualised. Insulin regimens where possible, should be chosen to fit in with patients existing eating habits.

6.2 Aims and Objectives of the Study

The aim of this study was to investigate the extent to which Chinese diabetic patients consider the dietary advice they have received to coincide or contradict their perception of the appropriate mangement of the disease and also the extent to which they are following the advice given.

The objectives of this project was to examine the following:

1) Beliefs about the causation and management of diabetes with particular reference to traditional ideas and the role of diet
2) The nature of dietary advice reported to have been received by this group of patients and
3) Dietary habits and compliance with hospital advice

6.3 Methodology

6.3.1 Methods of Data Collection

Most respondents were expected to be illiterate which meant that it was essential to collect data by personal interview.

6.3.1.1 The Interview Schedule

Each respondent was interviewed in Cantonese by the researcher using a semi-structured questionnaire (Oppenheim, 1986) which covered the following areas:-

a) *Socioeconomic characteristics* - This included personal details on areas such as place of birth, occupation, literacy, educational attainment, age and years of residence in the UK

b) Various sections were designed to probe respondents' beliefs concerning the causation and management of diabetes; dietary advice received from health professionals as well as friends and relatives; dietary habits as collected by the 24 hour recall method and food frequency list.

See Appendix 6.1 for a copy of the English version of the questionnaire.

There are of course limitations with this approach. Since a questionnaire based assessment of patient behaviour is not for the subjects direct benefit, his motivation may not always be optimal, they may want to present themselves favourably even when their answers are anonymous (Sullivan, 1979). Nevertheless, this form of assessment has been used to investigate a range of aspects of diabetes from the incidence of side effects (Shaw, Bulpitt & Bloom, 1977) to the knowledge patients have about their condition (Karlander, Alinder & Hellstrom, 1980).

In an attempt to enhance motivation, each subject was given the chance to express their opinions beyond the confines of the questionnaire.

6.3.2 Assessment of Food Consumption

A modification of the diet history method by Burke (1947) was used to collect data on the current food habits of respondents. This was believed to be the most suitable method since the intention was to investigate the qualitative nature of foods consumed, as well as meal patterns and frequency of consumption of different foods. The overall eating pattern together with a 24 hour recall of foods eaten were obtained from interviewees. The respondent was first asked to recall the meal they remembered best. Questions were then asked concerning each meal e. g. "What did you have for breakfast?" coupled with "What do you usually have for breakfast?". The quantities consumed were recorded in common household measures such as cups, bowls, slices, portions etc. . The reliability of the data obtained was cross-checked by using a food list and questioning individuals on the frequency of consumption of each food.

This method was employed since the review of the literature and results from the pilot study of the elderly sample had shown the traditional Chinese diet as being fairly constant. Use of this modified dietary method was therefore believed to give sufficiently accurate results about the pattern of food consumption.

6.3.3 The Population and Sample

Contacts were established with the consultants in charge of the diabetic clinics at the Middlesex and University College Hospitals in London. These 2 hospitals were selected because they were located in the Westminster district of London (i. e. near Soho) and were anticpated to be able to provide a sufficient number of Chinese diabetics for study.

After explaining the objectives of the study, the consultants agreed to provide a list of the names, addresses and telephone numbers of diabetic Chinese patients who had attended their clinics. However, since the addresses and telephone numbers of all these patients were not available at the time when the lists were drawn up not all potential respondents could be contacted in the same way.

Firstly, patients whose addresses and phone numbers were available were contacted by letter (See Appendix 6.2 for the English copy of the letter) which described the aims of the project and how they came to be chosen for study. It included the assurance of anonymity and confidentiality and stresssed the importance of obtaining their cooperation in order to promote greater understanding between Chinese patients during contact with health service personnel.

A consent form was enclosed together with a reply-paid envelope so that potential respondents could indicate to the researcher whether they would be willing to participate in the study and if so indicate a time and place to meet. Several telephone calls had to be made to non-respondents firstly to allay suspicion and secondly to re-iterate the aims of the project. Confidentiality was again assured and an attempt was made to convince respondents that the researcher was not selling anything!

Those contacted by letter were either interviewed in their own home or in the Chinese community centre in Gerrard Street.

Secondly, patients whose telephone numbers and addresses were not available were contacted in a different way. An arrangement was made between a member of the secretarial staff at the outpatient clinics to contact the researcher when the next check-up appointments of these patients were confirmed. Recruitment of such patients took place

in the clinics on the day of their appointments, interviews were conducted in the waiting area of these clinics either before or after they had been seen by the doctor.

All interviews were carried out between Tuesday and Friday since it was expected that patients might deviate from their routine dietary patterns at weekends which may have an effect on the type of foods recorded in the 24 hour recall.

Questionnaires took from between 25mins to 45mins to administer.

22 diabetic patients (13 females and 9 males) were recruited by these two methods for study. Although no patient refused to cooperate 2 subjects had to be excluded from the study. Firstly, one patient had been diagnosed as being diabetic during pregnancy but no longer suffered from the condition when the researcher made contact. Secondly, the other patient was a diabetic boy aged 10 who was not expected to be able to give sufficient details to certain questions in the interview schedule. This left a sample of 20 patients 12 of whom were female and 8 male.

6.4 Data Processing and Statistical Analysis

Closed questions in which respondents were given a limited choice of answers were coded after each interview. Since the questionnaire contained some open-ended questions, numerical codes could not be assigned at the outset because the range of possible answers was unknown. Consequently, at the end of data collection, a listing of responses was drawn up and a coding frame devised and each answer given a numerical code.

All codes were then transferred onto take-off sheets and entered for statistical analysis onto a computer data file using SPSSx and Minitab at the KQC Computer Centre. The statistical significance of relationships between certain sets of variables were determined by Chi-Square analysis (relationships were considered statistically significant at the 0. 05 level).

6.5 Characteristics of Patients

6.5.1 Country of Birth and Age

The majority of patients were from Hong Kong (16 - 80%) whilst 3 (15%) and 1 (5%) originated from Mainland China and Vietnam respectively.

Subjects were aged between 41 and 72 years old ($x = 57.4$).

Table 6.3 Age Distribution of Patients by Country of Birth

Age Group	Country of Origin			Total
	Mainland China	Hong Kong	Vietnam	
40-49	--	2 (10%)	1 (5%)	3 (15%)
50-59	--	7 (35%)	--	7 (35%)
60-69	3 (15%)	6 (30%)	--	9 (45%)
70+	--	1 (5%)	--	1 (5%)
Total	3 (15%)	16 (80%)	1 (5%)	20 (100%)

6.5.2 Length of Stay in Britain

The average length of stay in Britain of patients interviewed was 18. 3 years with a range of 7 to 30 years. Most of the respondents (19 - 95%) had been in this country for more than 10 years.

Table 6.4 Length of Stay in Britain

Years in Britain	Number	%
< 10	1	5
10-14	5	25
15-19	5	25
20-24	6	30
25-29	1	5
30	2	10
Total	20	100

Those who had spent less than or equal to 15 years in the host country were grouped into a shorter stay category (6 - 30%) whilst respondents who had been resident for over 15 years were classified as longer stay residents (14 - 70%). Analysis however, showed that there were no differences among these two groups.

6.5.3 Education and Language Skills

The majority of interviewees (18 - 90%) had received some primary education in their country of origin whilst only 2 (10%) went on to secondary school but left before taking any formal exams.

Proficiency of Spoken and Written English

Having little education or English tuition in their country of origin, it was not surprising to find out that with the exception of 1 patient, all interviewees claimed a poor proficiency in spoken English. None of the respondents however believed they were proficient in the written English language.

Table 6.5 Proficiency of Spoken and Written English

Proficiency	Spoken	Written
Good	0 (0%)	0 (0%)
Average	1 (5%)	0 (0%)
Poor	19 (95%)	20 (100%)
Total	20 (100%)	20 (100%)

Length of stay in Britain was not significantly correlated with either competence in spoken or written English. The nature of contact with the indigenous population is likely to be a more important factor influencing English speaking ability than length of stay.

In this instance, the extent of social contact between respondents and the local community is likely to be slight, apart from the waiter-customer relationship for those respondents involved in the catering business.

6.5.4 Occupation

Half of the respondents were housewives, of the remainder, the majority of patients were employed either in catering (restaurants or takeaways) or in businesses supporting the catering business (food delivery).

Table 6.6 Occupation

Occupation	Number	%
Housewife	10	50
Restaurant worker	4	20
Runs takeaway	4	20
Food delivery driver	2	10
Total	20	100

There was no difference between the level of education received by respondents and their occupation.

6.5.5 Duration Since Diagnosis of Diabetes

Diabetes had been diagnosed an average of 6.2 years ago with a range of 3 to 18 years.

Table 6.7 Duration Since Diagnosis of Diabetes

Years Since Diagnosis	Number	%
3	3	15
4	5	25
5	5	25
6	1	5
7	1	5
8	3	15
14	1	5
18	1	5
Total	20	100

6.5.6 Diabetic Complications

Diabetic complications were evident amongst 55% (11) of patients. The most common problem cataracts was prevalent in 25% (5) of patients interviewed. 15% (3)

suffered from hypertension, 10% (2) from peripheral neuropathy and 5% (1) from ischaemic heart disease. One patient (5%) was afflicted with vitiligo.

6.6 Knowledge of Traditional Chinese Medicine

6.6.1 Dietary Beliefs about the Causation of Diabetes

Culture often influences people's perception of the causality of different conditions and consequently the treatment that is considered appropriate.

When question .ed about their knowledge of traditional Chinese medicine, only 5 subjects claimed that they knew a little about the subject. However, without being prompted, 3 out of these 5 patients were able to elaborate about the existence of Yin and Yang and the Five Evolutive Phases. Asked if they had heard about the 3 different types of diabetes associated with stomach, lung and kidney fires, all were reluctant to give a positive response. Although one interviewee actually did believe her diabetes to have resulted from weak kidneys, she was hesitant to classify her condition as being of the Lower type associated with kidney fire.

Since none of the respondents classified their diabetes in terms of deficient lung, stomach or kidney fire, it was expected that they would attribute it to the more commonly accepted explanations for diseases i.e. an imbalance of energy. This was not found to be the case however. Whilst 10 (50%) patients reported that they did not know the cause of diabetes, the remaining 10 (50%) offered various other explanations which included inheritance (6 - 30%), obesity (2 - 10%), weak kidneys (1 - 5%) and overeating (1 - 5%). Interestingly, this agrees quite well with results from the elderly study, where the most popular explanation offered by 38 (26%) respondents was also inheritance, whilst 34 (23%) others attributed the cause to an excess consumption of sugar.

6.6.2 Food Modification for the Prevention and Treatment of Diabetes

Although respondents did not articulate the cause of their diabetes in terms of energy imbalance, 16 patients did believe that certain foods they were eating at the time of diagnosis played a part in precipitating the onset of the disease. Sugar was considered to have been the main culprit, followed by fat, "cold" foods, excess foods, excess snacks and monosodium glutamate.

Table 6.8 Foods Believed to Have Precipitated the Onset of Diabetes

Food Items	Number	% (N=16)*
Sugar	12	75
Fat	4	24
"Cold" foods	2	13
Excess foods	2	13
Excess snacks	2	13
Monosodium glutamate	1	6
* Column adds to >100% because respondents could give more than one answer		

Interestingly, 2 (10%) interviewees believed that if they had eaten more herbs as they approached middle-age their bodies would have been strong enough to resist the disease. Beliefs in the value of traditional herbal remedies is likely to be very important to a sick person and 4 repondents felt that herbs were useful in alleviating the symptoms of diabetes and consumed mixtures like ginseng and gypsum (1), Pills of Six Ingredients (1) and various decoctions of herbs (from traditional herbalists) on a weekly basis. None of them however, reported that they consumed the traditional remedy of Pills of the Eight Ingredients.

18 (90%) patients believed that certain foods were beneficial for diabetics and all of them reported trying these remedies.

Table 6.9 Foods Believed to Have Beneficial Effects for Diabetes

Food items	No	% (N=18)*
Pork pancreas	7	39
Red berry	7	39
Bitter melon	4	24
Pig's stomach	4	24
Ginseng	3	18
Boiled vegetables	3	18
Mountain yam	3	18
Chinese yam	2	12
Corn silk	2	12
Tofu	1	6
French beans	1	6
Apple	1	6
Kidneys	1	6
Black sesame soup	1	6
* Column adds to more than 100% because respondents could give more than one answer		

As can be seen from the above table, boiled pork pancreas taken with soup was the most popular item, followed by red berry, bitter melon, pig's stomach, ginseng, boiled vegetables, mountain yam, Chinese yam, corn silk, tofu, french beans, apple, kidneys and black sesame soup. The method of boiling vegetables before consumption was mentioned by 3 respondents as being an effective way of cutting down their starchy content.

Although only 5 subjects reported vague familiarity with traditional Chinese medicine, it appears from their knowledge of medicinal foods specific for diabetes, that most respondents were more familiar with these concepts than they claimed.

Table 6.10 illustrates the breakdown of these foods according to the energies and flavours which they are traditionally believed to possess.

Table 6.10 Foods Believed To Have A Beneficial Effect For Diabetes According To The Different Energies and Flavours They Possess

Food Items	Energy	Flavour
Pork pancreas	Neutral	Sweet
Red berry	--	---
Bitter melon	Cold	Bitter
Pig's stomach	---	---
Ginseng	Neutral	Sweet
Boiled vegetables	Neutral	Sweet
Mountain yam	---	---
Chinese yam	Neutral	Sweet
Corn silk	Neutral	Sweet
Tofu	Neutral	Sweet
French beans	Neutral	Sweet
Apple	Cool	Sweet
Kidneys	Neutral	Salty
Black sesame soup	Neutral	Sweet

It can be seen that the majority of foods have a neutral energy and a sweet flavour. As mentioned before, consumption of foods with a neutral/cool energy and sweet flavour is believed to be beneficial for diseases arising from deficient yin, like diabetes. The use of kidneys and black sesame soup by 2 interviewees illustrate organ as well as colour therapy. Black being associated with the kidneys according to the Five Phases Correspondences and as such, eating kidneys as well as other foods with the colour associated with this organ benefits its corresponding internal one. Since the kidneys are involved in the production of urine, beneficial effects (i.e. decrease in urine volume) are also believed to be derived.

6.6.3 Other Sources of Information

Of the 20 patients interviewed, 6 (30%) knew friends who had diabetes. However, only 4 (20%) of them ever discussed the condition, usually swopping information and recommending remedies that each had tried.

Pork pancreas was recommended by friends to 2 (10%) patients and Pills of Six Ingredients by 1, whilst a change in lifestyle to include early nights and more exercise was advised by friends to 3 other patients.

6.7 Management of Diabetes

6.7.1 Methods of Seeking Care

People who have not grown up in Britain may be used to a system of health care that is completly different from the National Health Service. Those on low incomes in rural areas may have relied far more on traditional or informal systems of health care. In every community, there is a chain of referral used when a patient becomes ill. Patients from different backgrounds are likely to use different chains of referral. In Hong Kong, it is quite common to try out 2 or 3 doctors for the same problem. This was found to be the case, in this study most (13 - 65%) preferred to get at least 2 opinions.

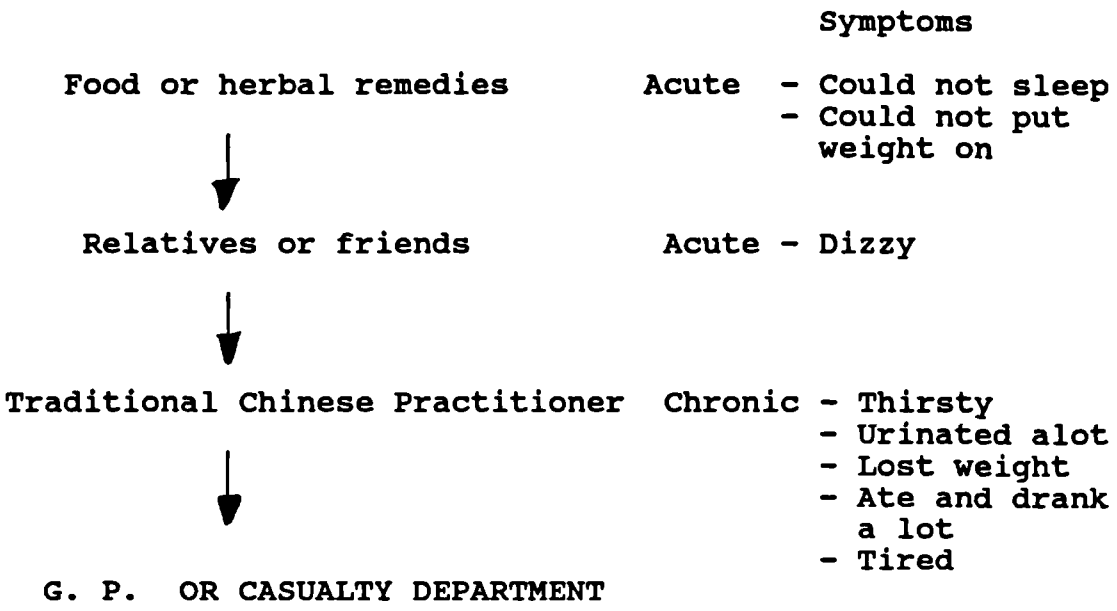
A variety of symptoms were evident before patients sought help from their GP's.

Table 6.11 Symptoms of Diabetes

Symptoms	Number	% (N=20)*
Thirsty	16	80
Urinated frequently	13	65
Tired	9	45
Lost weight	5	25
Drank a lot	5	25
Could not put weight on	3	15
Dizzy	3	15
Could not sleep	1	5
* Column adds up to >100% because respondents could give more than one answer		

In this study, the majority of patients sought help in the order shown in Figure 1. A substantial minority (6) consulted a traditional Chinese practitioner before going to see their GP.

Figure 6.1 Typical Chain Of Referral Used By Chinese Diabetic Patients



6.7.2 Treatment and Treatment Compliance

Of the 20 patients interviewed, 15 (75%) were non-insulin dependent (NIDDM) and were treated with oral hypoglycaemic agents and diet, 1 (5%) was insulin-dependent requiring insulin injections and dietary control and 4 (20%) were treated by diet alone.

Almost all those (9 - 60%) on oral hypoglycaemics reported taking medications exactly as prescribed whilst the remaining 6 interviewees admitted to incomplete compliance blaming the side effects of oral hypoglycaemics (headache, gastrointestinal disturbances and rashes), forgetfulness and inability to renew prescriptions on time because relatives/friends were unable to accompany them to the clinics. These patients reported that they either took their medication 'almost everyday' (5 - 34%) or 'irregularly' (1 - 6%).

6.7.3 Follow-Up Visits

Frequency of follow-up to see doctors in the diabetic clinics ranged from once to 3 times a year. On these occasions, the respondents were asked to give a sample of their blood usually after they had been weighed. Patients were seen by the clinic doctor either before or after these procedures had been performed.

Table 6.12 Follow Up Visits per Year

Follow Up/Year	Number	%
Once	6	30
Twice	13	65
Three Times	1	5
Total	20	100

6.8 Dietary Management of Diabetes

6.8.1. Advice From Dietitians at the Clinics

Of the 20 patients interviewed, only 12 reported having been advised once by a dietitian at the diabetic clinics though none of them reported making any follow up visits. Although 8 out of these 12 diabetics said that they had been advised in terms of Chinese foods, none of them were able to relate back specific examples as can be seen from the following tables.

Tables 6.13, 6.14 shows that the general verbal advice reported to have been received by this respondents was to avoid excessive consumption of food particularly of sugar, fat, alcohol, processed foods and increase the fibre intake by including e. g. more vegetables, beans, brown rice and brown bread. Asking clients to consume more steamed foods in an attempt to reduce their fat intake may or may not have the desired effect however. Oil is often added either before or after steaming certain dishes like fish, chicken, spareribs, egg etc. to add more taste to the food.

Table 6.13 Foods Reported To Have Been Advised by Dietitians to Avoid

Food Items	Number	% (N=12)*
Excess sugar	10	83
Excess fat	8	67
Processed foods	5	42
Excess foods	4	33
Alcohol	4	33
Fizzy drinks	3	25
Cakes	2	17
Sweet soups	2	17
Fried foods	1	8
* Column adds up to more than 100% because respondents could give more than one answer		

Table 6.14 Food Reported to Have Been Advised by Dietitians to Consume

Food Items	Number	% (N=12)*
Vegetables	9	75
Steamed dishes	2	17
Brown rice	2	17
Porridge	1	8
Brown bread	1	8
Beans	1	8
Clear soup	1	8
* Column adds up to more than 100% because respondents could give more than one answer		

The likelihood of patients ever eating brown rice is virtually nil. To Chinese, a meal is not a complete meal unless there is boiled white rice (it does not need to contain any other dishes). Someone who has not eaten rice all day will deny having eaten at all, even though they may have consumed a large quantity of snacks. Although all 12 patients believed that it was important to follow this dietary advice, 4 patients expressed

their concern about the practicality of following this advice. The unpalatibility of brown rice (and also brown bread) rendered compliance so difficult that they were unable to consume even one serving per day. One patient confided that brown rice reminded him of his poor village days when his parents could not afford to buy white rice and so had to make do with the unhusked version. He was unhappy to remember such occasions. Because of this, these 4 patients reported that they were only moderately satisfied with the dietitians' advice whilst the remaining 8 respondents all expressed satisfaction with the dietitians recommendations on dietary changes.

6.8.2 Advice From Doctors at the Clinics

The general dietary advice reported to have been given by doctors was similar to that of the dietitians (Tables 6.15, 6.16) i. e. to avoid excessive consumption of food particularly of sugar, carbohydrates (e. g. rice, dark soy sauce), fats (e. g. fatty meat and fried foods), alcohol, and increase the fibre intake by including more vegetables and fruit.

Table 6.15 Foods Reported To Have Been Advised by Doctors to Avoid

Food Items	Number	% (N=20)*
Excess foods	14	70
Excess carbohydrates	9	45
Sugar	9	45
Fatty meat	9	45
Alcohol	8	40
Excess rice	7	35
Dark soy sauce	2	17
Fried foods	2	17
* Column adds to more than 100% because respondents could give more than one answer		

Table 6.16 Foods Reported To Have Been Advised by Doctors to Consume

Food Items	Number	% (N=20)*
Fruit	18	90
Vegetables	18	90
Lean meat	7	35
Small frequent meals	1	5
* Column adds up to >100% because respondents could give more than one answer		

Interestingly, a comparison of the dietary advice reported to have been received from dietitians and doctors (Appendixs 6.3, 6.4) show that none of the 20 respondents reported being advised to eat more brown bread or brown rice by the doctor. Maybe it was for this reason that all 20 patients believed it was important to follow the doctors advice and all were satisfied with the practical recommendations.

When asked which member of the diabetic team (nurse, dietitian or doctor) they would prefer to give dietary advice, just over a half of the patients (11 - 55%) expressed no preference whilst 5 (25%) patients preferred a dietitian (preferably Chinese). The remaining 4 patients who reported that they were only moderately satisfied with the dietitian's advice preferred the doctor to advise them on dietary matters.

6.8.3 Methods Used to Communicate Advice

A primary requirement for effective communication between patients and health professionals is a common language. However, since all but one diabetic patient claimed a poor proficiency in spoken English, a relative/friend always accompanied them to translate advice during a consultation.

Of the 12 patients who reported being advised by a dietitian, 5 (42%) said they had received a standardised diabetic dietsheet in English. However, none of these 5 reported using them for reference, since the dietsheets were written in English, comprehension was impossible. Even for those who enlisted the help of relatives to translate and/or read its contents found that the dietsheets contained traditionally 'unacceptable' foods like brown rice and brown bread.

When patients were asked about the system of carbohydrate exchanges, only 4 (33%) out of 12 were aware of its existence but expressed confusion concerning its application. In Cantonese, some nutrient names describe a group of foods, for example, carbohydrates or 'dean fan jat' literally means 'flour-based'. So when patients were asked about examples of carbohydrate foods, noodles, cakes and biscuits were mentioned but no-one quoted sugar or rice!. Neither fruit like bananas nor vegetables such as potatoes were believed by respondents to contain any carbohydrates at all. Excess carbohydrates were considered fattening by all interviewees, none of them were actually aware that carbohydrates are broken down to sugar (glucose) in the body.

Similarly, protein in Cantonese is 'daan baak jat' which literally means 'egg-white based'. None of the respondents mentioned meat, poultry or fish as containing protein, only eggs and meringue.

6.9 From Advice to Practice

Cultural influences and environmental factors determine the foods to be eaten, the meal patterns, the number of meals per day as well as methods of cooking, eating and utensils used.

Douglas & Nicod (1974) considered a meal to be a situation in which food is eaten as a part of a structured event i.e. organised according to rules prescribing time, place and sequence of actions. A snack occurs when a food is eaten as part of an unstructured event, where there are no formal rules and each food item is self-contained.

Every part of China has its own food rules, basically similar to those of other regions but with their own flavours and arrangements. In the discussion of traditional meals, Hong Kong was taken as a typical example.

Generally, 3 main food events in Britain were described by patients.

Table 6.17 Main Food Events of the Day

Event	Time Taken
Breakfast	7.00-9.00am
Lunch	12.00-1.30pm
Dinner	6.00-8.00pm

6.9.1. Breakfast

Traditionally, breakfast can include any or all of the following: rice, congee, buns, pastries, dumplings and noodles. It is usually eaten outside the home and bought e.g. in teahouses, restaurants, street vendors and markets.

The pattern of consumption seems to have shifted from eating cooked items to convenient foods which require little or no cooking (Table 6.18). White bread was the most popular food item consumed by 55% (11) of patients interviewed, this was eaten either on its own or with margarine and/or diabetic jam, peanut butter, cheddar cheese and boiled mashed egg. Cereals (porridge and cornflakes) were eaten with boiled water by 4 respondents. One patient had a Chinese steamed bun on its own. Only one subject had brown bread. Congee was consumed by 3 interviewees which were either based on leftover rice and cooked dishes from the previous evening's dinner or on easily available/quickly prepared ingredients (roast duck and cashew nuts (1), chicken and ginger (1), and dried oyster with thousand year old egg (1)).

Table 6.18 Foods Eaten At Breakfast

Food Items	Number	% (N=20)*
White bread	10	50
Cereal	4	20
Diabetic jam	4	20
Margarine	3	15
Congee	3	15
Egg	2	10
Roast duck	1	5
Chicken	1	5
Chinese steamed bun	1	5
Cheese	1	5
Brown bread	1	5
Cashew nuts	1	5
Dried oyster	1	5
Thousand year old egg	1	5

As for drinks, Chinese tea was most commonly consumed followed by English tea (made with semi/skimmed milk and teabags with or without a sweetener) and boiled water (Table 6.19).

Table 6.19 Drinks taken at Breakfast

Drinks	Number	%
Chinese tea	11	55
English tea	5	25
Milk	5	25
Sweetener	3	15
Horlicks	1	5
* Column adds up to more than 100% because respondents could more than one answer		

All respondents ate breakfast at home, the majority (15 - 75%) had the meal with their spouses whilst a minority (5 - 25%) ate breakfast on their own.

6.9.2 Lunch

Traditionally, most families have rice for lunch accompanied by a few side dishes of meat/fish/poultry and vegetables. This pattern of eating appears not to have changed dramatically for the patients interviewed. Lunch was a cooked meal for all respondents. Where rice, noodles or potatoes were eaten as the main staple, either one or two side dishes of meat/fish/poultry and vegetables accompanied the meal. Boiled wheat noodles were taken in a soup by 8 respondents, whilst 2 interviewees ate their rice noodles stir-fried. Plain congee was eaten by one subject together with a small amount of curd cheese for flavour (Table 6.20).

Table 6.20 Foods Eaten At Lunch

Food Items	Number	% (N=20)*
Vegetables	13	65
Noodles	10	50
Boiled white rice	8	40
Soup	8	40
Red meat	7	35
Poultry	5	25
Fish	4	20
Fruit	4	20
Congee	1	5
Curd cheese	1	5
Red dates	1	5
Potatoes	1	5
* Column adds up to more than 100% because respondents could give more than one answer		

Surprisingly, convenience items were not consumed by any of the patients interviewed. Bread was not included at lunch-time at all either as the base of the meal nor as a sandwich.

Lunch was accompanied by Chinese tea and boiled water for 12 patients (60%) (Table 6.21). Those who had soup felt little need for a beverage accompaniment.

Table 6.21 Drinks Taken at Lunch

Drinks	Number	%
Chinese tea	7	35
Boiled water	5	5

The majority of respondents ate lunch on their own either at home (15 - 75%) or in a restaurant in Chinatown (3 - 15%). Whilst 2 (10%) interviewees shared lunch with friends at the Camden Community Centre.

6.9.3 Dinner

Traditionally, dinner is the main meal of the day usually taken with the entire family with the meal comprising of a much wider selection of dishes than at lunch and always accompanied by rice.

Dinner was considered by all respondents to be the most important food event of the day where the practice was for all members of the household to dine together. Rice was the main staple for 18 (90%) patients, whilst one (5%) had left over congee from lunch, and one (5%) ate rice vermicelli. These staples were accompanied by more side (2 or 3) dishes of meat/fish/poultry and vegetables than those served at lunch. Soup was drunk with the meal by 7 (35%) interviewees (Table 6.22).

Table 6.22 Foods Eaten At Dinner

Food items	Number	% (N=20)*
Vegetables	21	105+
Boiled white rice	18	90
Fruit	13	65
Red meat	9	45
Poultry	8	40
Soup	7	35
Fish	7	35
Offal	3	15
Beancurd	2	10
Congee	1	5
Curd cheese	1	5
Noodles	1	5
Prawns	1	5
Dried shrimps	1	5
Wood fungus	1	5
* Column adds up to more than 100% because respondents could give more than one answer + One respondent had 2 servings of vegetables		

Almost all respondents (17 - 85%) were at home to have this meal, the majority sharing it with all family members. Only a small number of interviewees (3 - 15%) had dinner at their working place, In the cases where all family members did not have this meal together at home, at least some of them (children and relatives) ate with the respondent.

Chinese tea or boiled water were drunk by 16 (80%) respondents after the meal (Table 6.23) which was accompanied by fruit for 13 (65%) of these interviewees. All believed this practice was conducive to aiding the process digestion.

Table 6.23 Drinks Taken At Dinner

Drinks	Number	%
Chinese tea	9	45
Boiled water	7	35

Table 6.24 illustrates foods which respondents reported eating as recorded in the 24hr recall.

Table 6.24 Foods Eaten (from 24hr Recall)

Vegetables Aubergine, bamboo shoots, beansprouts, bitter melon, broccoli, cauliflower, celery, Chinese chives, Chinese flowering cabbage, Chinese leaves, corn silk, kale, leeks, lettuce, sea kale, spinach, spring greens, peppers

Fruits Apple, banana, cherries, grapes, mango, orange, pear, tomato, orange

Soups Beancurd and spinach, chicken, clear vegetable, egg flower, Yerk Choi soups

Offals Chicken liver, pork kidneys, pork pancreas

Red meat Beef, pork

Poultry Chicken, chicken wings, duck, duck's wings

Fish Coley, garoupa, lemon sole, mackerel, plaice, red mullet, salmon heads, sea bass

Dried ingredients Shrimps, black beans

Preserved ingredients Preserved plum

Cooking-methods Stir-fry, steam, boil, roast

6.9.4 Other Eating Occasions

Traditionally, between meal snacks are frequent and include fruit, soup and fried noodles with vegetables and meat, sweet snacks and spicy snacks like chicken feet or other dimsum.

6.9.4.1 Morning Snack

In this study,biscuits were by far the most frequently consumed (12 - 60%) which was accompanied by a beverage (coffee (4 - 20%), boiled water (4 - 20%), Chinese tea (3 - 15%), Horlicks (1 - 5%). One (5%) respondent had an orange as a snack (Table 6.25).

Table 6.25 Snacks

Food Items	Morning	Afternoon	Evening
Crackers/Biscuits	12 (60%)	10 (50%)	1 (5%)
White bread	----	4 (20%)	3 (15%)
Dimsum	----	1 (5%)	----
Coffee	4 (20%)	3 (15%)	----
Chinese tea	3 (15%)	1 (5%)	5 (25%)
Horlicks	1 (5%)	----	----
Orange	1 (5%)	----	2 (10%)
Herbal tea	----	2 (10%)	1 (5%)
Ovaltine	----	----	3 (15%)
Boiled water	----	3 (15%)	----

6.9.4.2 Afternoon Snack

Biscuits were again the most frequently consumed afternoon snack (10 -50%), followed by white bread (4 - 20%) and dimsum (1 - 5%). 9 (45%) respondents had a drink with their snack (coffee (3 - 15%), herbal tea (2 - 10%) and Chinese tea (1 - 5%))(Table 6.25).

6.9.4.3 Evening Snack

White bread was eaten by 3 (15%) interviewees, dimsum by 1 (5%) and biscuit by 1 (5%). The tendency was for respondents to have just a drink before going to bed. Chinese tea was the most popular, drunk by 5 (25%) respondents followed by Ovaltine (3 - 15%), herbal tea (1 - 5%) and boiled water (11 - 55%) (Table 6.25).

6.9.5 Usual Patterns of Food Consumption

Except during special occasions like festivals and weddings, the usual pattern of food consumption was reported by all interviewees to remain fairly constant. Data collected in the 24hr recall was believed by these respondents to be representative of their everyday diet.

Despite this reassurance, the reliability of the 24hr recall was still cross checked using a food frequency list. Appendix 6.5 illustrates the frequency of consumption of foods per week and per month. Data collected in the 24hr recall appears to correspond very well with that collected in the food frequency list (Appendix 6.6).

6.10 Dietary Compliance

Dietary compliance among diabetics has been shown to be poor (Thomas, 1982). There have been many reasons put forward to explain this, though one commonly accepted factor, cost is probably not of major importance. The fundamental reason for poor compliance is that people are highly resistant to dietary changes.

In this instance, there is also the possibility of a competing ideology and it is interesting to consider whether the traditionally advocated shift to "cool"/"neutral" energy foods was being practiced. In fact, looking at the breakdown of Chinese foods given in the 24 hour recall by each respondent according to their traditional energies, it was found that 64% or more of the items eaten possessed either a "neutral" and/or "cool" energy. As mentioned previously, foods possessing a "neutral" and "cool" energy benefits diseases arising from yin deficiency. So it appears that although respondents did not explain the cause of their condition in classical terms, in practice, even if they did not articulate this, interviewees were consuming foods beneficial for diabetes.

Now turning to a comparison between practice and western advice, results from the modified diet history and combined food frequency list revealed that patients were not eating foods exactly as recommended as we shall see in the next section. No subject admitted to non compliance however, this might be because dietary indiscretions were

believed to be either too trivial to mention or considered the province of the doctor or dietitian.

6.11 Compliance with BDA Recommendations from Dietitians and Doctors

6.11.1. Decrease Sugar and Other Sources of Sugar

Although all interviewees reported not eating any cakes, the majority (15 - 75%) ate at least once serving of digestive/rich tea biscuits between meals to prevent becoming hypoglycaemic (see Appendix 6.7 for the number of servings of foods eaten per day).

Similarly, sugar did not appear in the 24hr recall at all. However, since it is customary for Hakka Chinese to dip their roast pork ('siu juk') into sugar before eating, the researcher decided to question about this practice whenever, interviewees mentioned consuming this food. Indeed, for those (2 - 10%) who did eat roast pork, this practice was still being followed.

6.11.2. Increase Fibre Intake

All 20 patients reported eating at least one serving of vegetables a day, of these, 13 (65%) interviewees had 2 portions whilst 2 (10%) respondents included 3 servings in their daily diet (see Appendix 6.7).

Fruit was eaten by 15 (75%) patients at least once a day, of these, 5 (25%) interviewees included 2 servings in their diet (see Appendix 6.7).

Only one (5%) respondent reported eating a serving of brown bread. Brown rice was not adopted by any of the patients interviewed and neither were high fibre cereals or bran supplements.

6.11.3. Decrease Total Fat Intake

Among animal foods eaten, pork and beef were the most popular followed by chicken and duck. Lamb did not appear in any of the meals.

Red meats were included at least once a day by 15 (75%) interviewees, 5 (25%) patients had a portion for lunch as well as for dinner. Cheaper cuts of meat were chosen by respondents including pork belly slices, spare rib pork, chuck and stewing steak. Since neither duck nor any of these cuts of meat can be considered as lean, the proportion of fat derived from these sources is likely to be quite high.

6.12 Summary

Although some aspects of lifestyle have been modified since coming to Britain like inclusion of some western food and dress, there is still great emphasis on and significance attached to dietary traditions.

Length of stay did not appear to affect the extent to which respondents still held on to their traditional ideas about food and their therapeutic application. It is probable that as a source of comfort and familiarity, immigrants hold more tenaciously to their beliefs particularly during illness. Although respondents were reluctant to admit that they knew about traditional Chinese medicine their rationale for suggesting specific foods did seem to be traditionally orientated. The various medicinal foods used by respondents illustrates quite well the traditional concepts of (yin - neutral and cool) foods for a condition arising from deficient yin, organ and colour therapy.

Many of the respondents still lived in extended families which meant that meals are often prepared for many individuals. To modify the diet of any one subject may make it difficult and perhaps less appetising for the remainder of the family.

Traditionally, the Chinese diet includes a variety of vegetables and pulses. Particularly for the poor, although several dishes are served at each meal, only a very small quantity of meat is actually consumed each day. The majority of dishes incorporate plenty of seasonal vegetables. The meal is often accompanied by soups (made from pulses, vegetables and meat) and the obligatory boiled white rice. Fruit and Chinese tea nearly always follow at the end of each meal. Although quite a large proportion of rice is consumed, the amount of fibre coming from fruit, vegetables and pulses is likely to be fairly high although it is unlikely to provide as much as the NACNE recommendation of 30g/day/person.

For patients whose mother tongue is not English, advice given in the form of specific foods may be far more effective than generalisations and theoretical concepts. Some nutrients are difficult to moderate. For example, oil is often poured liberally into a wok without measurement when frying garlic and ginger before adding other ingredients. Patients should be asked to try and add oil using a fixed number of tablespoons instead of free additions from bottles. Ordinary Chinese cooking does not necessitate exact quantities of ingredients to be added compared to making a cake, so this may be difficult to comply with. It is often held that carbohydrate exchanges are far too complicated especially for elderly NIDDM. Yet over-simplified advice such as 'don't eat too much sugary foods' given by both doctors and dietitians in this study can cause

just as much distress as poorly understood food lists. If such advice is given, it is obviously necessary to ensure that patients understand what foods are good sources of carbohydrates (as well as fat and protein). Patients who cannot cope with the carbohydrate exchanges system can be taught a simpler system of swops e. g. swop a slice of bread for half a bowl of rice.

Instead of advising patients to drastically change their diet to include non traditional foods like brown rice and brown bread, health professionals particularly dietitians should familiarise themselves with the more commonly used items which provide fibre in the diet. Although standardised dietsheets cannot be easily tailored to the individual since they can confuse the patient and lead to outright rejection of the advice prescribed, they may be of value as a source of reference to health professionals who occasionally counsel Chinese patients. It is unrealistic to expect 100% adherence to dietary changes every day of the week. In the short term, specific examples of foods will provide helpful guidelines to patients who can then swop or include certain foods maybe for 2 out of 3 meals a day. Longer term expectations can then be discussed individually and new targets set.

Communication and comprehension play major roles in patients dietary and compliance. The majority of Chinese elderly speak little or no English, even though a relative or friend accompany them to a consultation this sometimes does not have the desired effect. It could be argued that compliance improves since the whole family is involved in diabetic management. On the other hand, the relative may be the wrong age (child) or wrong sex and the consultation may become embarrassing. The relative may also have a poor command of English which may lead to the wrong interpretation.

Non compliance cannot be seen as a failure on just the patients part to cooperate with recommendations. The counsellor (dietitian or doctor) cannot be excused for factors which are under his control. For example, in this study, an articulate young relative commonly accompanied patients to the diabetic clinics. It was observed that staff tended to direct all conversation to the relative and to ignore elderly patients who were practically dragged around the clinic like a mop. In a society where the elderly are greatly valued, this practice does nothing for the morale of a person, particularly one who is ill.

In some circumstances, it may be important to have access to a trained interpreter or a patient advocate, with a command of the relative dialects. With experience, they will convey the detailed advice that the medical and other staff wish to give. They may

uncover other symptoms that require appropriate action and anxieties that need to be allayed.

Cantonese-speaking dietitians would have an enormous advantage in imparting practical dietary advice. The need for more Chinese language teaching aids is essential as are other approaches which include group sessions and practical cooking demonstrations. It may be important to identify the family members who controls cooking and shopping in these and other counselling sessions.

CHAPTER 7

A STUDY OF CHIEF DIETITIANS IN BRITAIN

CHAPTER 7
A STUDY OF CHIEF DIETITIANS IN BRITAIN

Having taken a glimpse from the patients' viewpoint, the next two studies took a closer look at those providing health care. For this study, dietitians were chosen as the study population as the professionals responsible for the nutritional component of health service provision for ethnic Chinese in Great Britain.

7.1 Aims and Objectives

The aim of this project was to examine the awareness and knowledge of chief dietitians concerning Chinese ideas about diet and health; management of Chinese patients and views about the provision of service within the NHS to ethnic Chinese patients.

The objectives of this study were to examine:

1. Extent of contact with members of the Chinese community
2. Patterns of disease among the Chinese population for which referrals to dietitians are made
3. Awareness and knowledge of the Hot/Cold concept as used to classify foods and conditions
4. Methods used to advise Chinese patients and areas of difficulty in communicating the advice
5. Dietary advice given to Chinese patients for common conditions
6. Provision of hospital meals for ethnic patients

7.2 Methods of Data Collection

It was decided to conduct this study using mailed questionnaires (Oppenheim, 1986) since it was the most economical method for reaching a large sample located in a wide geographical area; sampling could be more accurate since an envelope could be addressed to a particular individual; and respondents could consult patient records and other documents if necessary.

Although the main limitation to this type of survey method is low response, several points were considered to overcome this problem. The covering letter (Appendix 7.1) which accompanied the questionnaires described the aims of the project and how the addressee came to be selected. It also included the assurance of anonymity and confidentiality and stressed the importance of obtaining their cooperation in order to

promote greater understanding between ethnic Chinese patients during contact with other Health Service personnel. A stamped addressed envelope was enclosed to improve the response rate.

A structured questionnaire (Oppenheim, 1986) was designed to maintain what Festinger and Katz (1953) call 'respondent orientation', the questions were kept as simple and as straightforward as possible with the help of printed instructions. Although it was expected that the respondents would peruse the questionnaire before attempting to answer, the order of questions was nevertheless still considered important, so it was decided to start the questionnaire with a few simple questions.

When the returns began to decline about 6 weeks after the initial mailing, a reminder (Appendix 7.2) was sent to those who had not returned the questionnaire. After a further 4 weeks, a second copy of the questionnaire was sent, together with the original covering letter and the reminder.

7.3 The Population and the Sample

A list of general hospitals (136) with more than 200 beds located in London, Midlands area, Scotland and Wales was obtained from the current edition of the Hospital and Health Services Year Book (1987). Chief dietitians at these hospitals formed the study population.

7.3.1 The Pilot Survey

When the questionnaire (Appendix 7.3) had been formulated, a pilot study was carried out on 10 chief dietitians working in general hospitals situated in London, Midlands area, Scotland and Wales. The time period for the study was from June 1987 to September 1987.

The response rate for the pilot study was 100% and indicated to the researcher that a similar result could be expected for the main survey (only one respondent needed a reminder to send the questionnaire back!).

Some alterations were made to the questionnaire and further questions added following the results from the pilot study.

7.3.2 The Main Study

Questionnaires were posted in December 1987 to the remaining 126 chief dietitians working in the general hospitals in the original list compiled from the Hospital and Health Services Year Book.

7.3.3 The Questionnaire

The main survey questionnaire (Appendix 7.4) was divided into 5 sections. The first and second sections were designed to examine the experiences of dietitians who had dealt with members of the Chinese community; the nutritional and dietary problems of patients treated and methods of advice used by dietitians.

The third section sought to explore the dietitians' awareness and knowledge about Chinese traditional beliefs concerning diet and health and the classification of foods and conditions according to the Hot-Cold concept used in Chinese medicine. The fourth section was formulated to examine the hospital meal service provided to ethnic minority patients, in particular the Chinese.

Finally, the last section sought to obtain personal information about the chief dietitians under study.

7.4 Data Processing and Statistical Analysis

Since the questionnaire contained some open-ended questions, numerical codes could not be assigned at the outset because the range of possible answers was unknown. Consequently, at the end of data collection, a listing of responses was drawn up and a coding frame devised and each answer given a numerical code.

All codes were then transferred onto take-off sheets and entered for statistical analysis onto a computer data file using SPSSx and Minitab at the KQC Computer Centre. The statistical significance of relationships between certain sets of variables were determined by Chi-Square analysis (Relationships were considered statistically significant at the 0.05 level).

7.5 Characteristics of Respondents

Of the 126 questionnaires initially mailed out, 107 were returned, giving a response rate of 85% after two reminders. 21 were deemed unusable leaving 88 for analysis.

As compared to typical response rates for general postal questionnaires of between 40% to and 60% (Dillman, 1978), the 85% response rate obtained in this study was excellent.

7.5.1 Personal Characteristics

A brief description of the respondents' personal characteristics are illustrated in Table 7.1. which shows that the majority (64% - 56) of dietitians were less than or equal to 35 years old. This ties in quite well with the dates of completion of training which revealed that 78% (69) of dietitians finished in the period 1970-1987.

Table 7.1 Personal Characteristics of Dietitians

Age Group	Number	% (N=88)
Up to 35	56	64
Over 35	24	27
No Answer	8	9
Total	88	100
Country of Birth	**No**	**% (N=88)**
UK	74	84
Africa	2	2
New Zealand	2	2
USA	2	2
Malaysia	1	1
No Answer	8	9
Total	88	100
Education	**No**	**% (N=88)**
UK	70	87
Africa	2	3
New Zealand	2	3
Australia	2	2
Belgium	1	1
France	1	1
Malaysia	1	1
South America	1	1
No Answer	8	9
Total	88	
Work Experience	**No**	**% (N=13)**
New Zealand	3	23
USA	3	23
Australia	2	15
Britain	1	8
Canada	1	8
Saudi Arabia	1	8
Switzerland	1	8
South Africa	1	8
Total	15	
Date of Completion of Training	**No**	**%**
1950-1959	5	6
1960-1969	6	7
1970-1979	36	40
1980-1987	33	38
No Answer	8	9
Total	88	

The majority of dietitians (84% - 74) replying to the questionnaire were born and educated (87% - 70) in the UK. The minority came from and were educated in countries as far a field as New Zealand and Africa.

As regards work experience abroad, none of the respondents reported that they had worked in Hong Kong or other South East Asian countries with a large Chinese community. However, 13 dietitians replying (15%) said that they had had some dietetic work experience abroad in Canada, New Zealand, Saudi Arabia, USA, Switzerland and South Africa.

7.5.2 Contact with Chinese Patients

Only 33 (38%) out of 88 replying to the questionnaire reported advising Chinese patients.

Table 7.2 Treatment of Chinese Patients According To Area

Location	Treat	Don't Treat	Total
London	11 (33%)	19 (35%)	30 (34%)
Midlands	8 (24%)	4 (73%)	12 (14%)
Scotland	4 (12%)	13 (24%)	17 (19%)
Wales	10 (30%)	19 (35%)	29 (33%)
Total	33 (38%)	55 (63%)	88 (100%)

Dietitians working in the Midlands area were more likely to advise patients of Chinese ethnic origin than those located in London and Scotland respectively although this was not significant. This result was rather surprising as the greatest concentration of Chinese are settled in the London and the South East (ca 40,000) whilst the Midlands area of the country holds the second largest settlement (ca 15,000). So it was expected that according to size only, the probability of more Chinese coming into contact with the National Health Service and hence dietitians would have been greater for those in London than those located elsewhere in the country.

Since Scotland contains the smallest concentration of Chinese compared with London and the Midlands (ca 4,700), in relation to the indigenous population of ca

5,000,000 the community form only a small minority, so contact with the NHS is likely to be less common. This was borne out by the results obtained in the analysis.

Dietitians in the younger age group were more likely to give advice to Chinese patients than those who were over 35 although this was not statistically significant. As mentioned earlier, 33 (38%) dietitians of the total (88) replying to the questionnaire reported advising patients of Chinese ethnic origin. The majority of these dietitians (90% - 30) reported that Chinese patients only formed a small proportion (less than a quarter) of their total workload. This was expected since despite the existence of "Chinatowns" in certain cities, the main feature of Chinese settlement is that it is scattered which means that in any one area their numbers are very small in relation to the total population.

From Table 7.3, it can be seen that 31% (16) of dietitians reported that their Chinese patients had originated from Hong Kong.

Table 7.3 Patient's Country of Origin

Country of Origin	No	% (N=33)
Hong Kong	16	31
Mainland China	10	20
United Kingdom	10	20
Malaysia	9	18
Vietnam	3	6
Don't know	3	6
Total	51	100
* Column adds up to more than 100% because respondents could give more than one answer		

Of those dietitians who reported advising Chinese patients, 81% (27) said they gave advice to those over 50 years old. The most common problems of this group are summarised in Table 7.4.

Table 7.4 Common Problems Requiring Dietary Advice

Problems	No	% (N=33)*
Diabetes	17	52
Obesity	6	18
Coronary heart disease	2	6
Hypertension	2	6
Renal failure	2	6
Cancer	1	3
Malnutrition	1	3
Overweight	1	3
Underweight	1	3
* Column adds up to more than 100% because respondents could give more than one answer		

From these results, it seems that diabetes and obesity featured quite prominently as a condition affecting elderly Chinese yet these are not mentioned as health problems afflicting the community in the House of Commons Home Affairs Report on the same in Britain (1985). Common health problems quoted in the report were gastric ulcer problems, bronchitis, respiratory tract infection, family planning problems, psychosomatic disorders, Glucose-6-D-phosphate dehydrogenase deficiency and amongst the elderly, poor eyesight, deafness, coughing, difficulty with walking, breast cancer, sensitive skins, and general weakness. In fact, none of the conditions mentioned in Table 7.4 are considered among the health problems in the report. Such conditions might be termed the so called "western diseases" and it is expected that their incidence would increase as the length of stay and exposure to the "west" increases.

7.5.3 Dietitians' Awareness of Chinese Patients Use of Other Treatments

Regarding alternative forms of treatment 21% (7) of dietitians giving advice reported that their Chinese patients sometimes used other remedies and only 6% (2) often tried different remedies with 15% (7) using herbal and 12% (3) food remedies. No dietitian said that their Chinese patients took proprietary western medicine for their conditions.

The reportedly small number of Chinese patients found to be using food/herbal remedies was unexpected. However, it may be that those dietitians who give advice

either did not probe into their patients' usage of such remedies or if they did probe into the subject, their questions were not answered (maybe because of communication problems or fear of being reprimanded).

7.6 Knowledge About Chinese Foods and Conditions According to the Hot-Cold Concept

Over a half (61% - 54) of the total dietitians replying to the questionnaire said that they were most familiar with the cultural and dietary rules of the Asian community, 18% (16) with West Indians and 16% (14) with other communities (Cypriots, Jewish and British). Overall, only 5% (4) of dietitians claimed to be familiar with Chinese cultural and dietary habits although this represents 12% of the 33 dietitians who reported seeing Chinese patients.

7.6.1 Classification of some Common Food Items

When the respondents were asked whether they were familiar with the concept of "hot" and "cold" foods used in Chinese medicine, 41% (36) of the total dietitians replying, claimed that they were familiar with the concept. However, when they were called upon to identify the qualities of each of the 26 food items presented, many of them (22) were unable to answer saying that they were not so familiar with the concept as to be able to attempt even a guess to each food classification. (The list of foods and their classifications was compiled based on reports by Anderson (1980) and Koo (1976).

It was expected that there would be a correlation between the age of dietitians and familiarity with the Chinese concept of Hot-Cold classification of foods. The younger dietitians through recent training and greater exposure to ethnic groups would be more familiar with the classification. Statistical analysis however, showed that there was no significant association between the age of dietitians and their familiarity with the Hot-Cold concept.

Of the 14 dietitians who attempted the food classifications, it appeared that there was a great deal of discrepancy in the degree of hotness or coldness ascribed to foods (Appendix 7.5). In only 10 out of the 26 food items presented did 50% or more of the dietitians attempting the classifications agree with the Chinese categorisation of the food. Furthermore, there were some contradictions in classifying the 'hotness' or 'coldness' of foods, for example, boiled white rice generally considered 'neutral' was classified as being 'hot' by some dietitians. It was surprising to discover that 33 dietitians who

reported advising Chinese patients, only 5 (15%) of them agreed with the generally accepted classification of boiled white rice (the mainstay of the Chinese diet). Dietitians who saw Chinese patients were no more likely to classify white rice correctly than dietitians who had no experience with such patients.

7.6.2 Symptoms of Excess Consumption of "Hot" Foods

Chinese tradition holds that "hot" foods increase the fire energy in the body as well as possessing the ability to produce acne, pimples, sore throat and nosebleeds.

When dietitians were asked what effects 'hot' foods were said to have on the body, none of these effects were mentioned however by the 10 dietitians who listed the following effects.

1. Eaten when body is cold/damp (2)
2. Produces temperature, anxiety, restlessness + discontent (1)
3. Produces fever (1)
4. Useful when depleted of energy (1)
5. Acts as a stimulant (1)
6. Increases blood flow (1)
7. Increases basal metabolic rate and affects mood (1)
8. Increases production of acetylcholine (1)
9. Shifts body base towards 'neutral' or 'hot' depending on the initial position of the body base (1)

7.6.3 Symptoms of Excess Consumption of "Cold" Foods

Similarly, Chinese tradition holds that "cold" foods decrease the fire energy within the body as well as possessing the ability to cause weakness. As with "hot" foods, none of the traditional effects were mentioned by the same 10 dietitians answering the question.

1. Not to be eaten if body is cold/damp (1)
2. Calms body, decreases temperature, anxiety, restlessness, discontent (2)
3. Removes infection (1)
4. Relieves congested and nervous conditions (1)
5. Have astringent or purifying properties (1)
6. Non stimulant (1)
7. Suppresses the release of certain hormones (1)

8. Shifts body base to neutral or cold depending on the initial position of the body base (2)

7.6.4 Classification of Conditions

Of the total dietitians replying to the questionnaire, 31% (27) said they were familiar with the Hot-Cold concept of conditions. Again, as with the classification of Chinese foods, the majority of these respondents were not so familiar with the concept as to attempt the classification of 19 conditions presented to them. Only 12 dietitians attempted the classifications of the 19 conditions (Appendix 7.6). These 12 dietitians also attempted the food classifications.

There were again discrepancies in the hotness/coldness ascribed to some conditions. Pregnancy brought the greatest agreement 83% whilst 33% or more agreed with the folk classification (Koo, 1984) of measles and fever.

7.7 Dietary Advice

Dietitians were asked to indicate what advice they would give to Chinese patients suffering from a number of common conditions. Out of the 33 dietitians who reported advising Chinese patients, two thirds of dietitians (22 - 67%) reported that they would include examples of Chinese food in their dietary advice only one third (11 - 33%) would not.

In general, very few specific examples of Chinese foods were given by these 22 dietitians as shall be seen in the following sections.

7.7.1 Diabetes

Respondents reported that they would advise diabetic patients to avoid 'cakes, sweet sticky dishes'. Since these terms encompass a wide selection of foods however, patients will probably have to use their own discretion in omitting certain items from their diet. The term 'squash' is ambiguous in that it could mean the vegetable squash or the drink. Some clarification is required to avoid confusion.

Table 7.5 Examples Of Foods Advised By Dietitians For Diabetes

Diabetes	Food Groups	Examples of Foods	
		English	Chinese
Avoid	Excess sugar	Sweet sticky dishes	Cakes, sweet soup, sweet condensed milk
	Excess fat	Deep fried, fried foods	Chinese sausage, fried rice, peanut oil spring rolls
	Processed foods	---	Instant noodles, white rice
	Miscellaneous	Large meat portions	Dumplings, ginger, milk, squash, sweet and sour foods
Consume	High fibre	Brown flour, fruit, vegetables	Bamboo shoots, brown rice, sprouted beans, wholewheat noodles
	Miscellaneous	---	Beancurd, stir-fry dishes

Classically, diabetes is believed to arise form a deficiency in Yin (cold) energy in the body which means that Yin foods (cool, sweet and pungent) are eaten to boost the deficiency. Similarly, folk classifications (Koo, 1984) have attributed diabetes to an insufficiency of energy in the body which means that intake of "supplementary" foods should also be increased to boost the deficiency.

From the dietary advice, there seems to be congruence with classical traditional prescriptions since fruit and vegetables are generally considered "cool/cold".

7.7.2 Hypertension

For hypertensive patients all of the foods which dietitians reported discouraging was because of their high sodium content. Unfortunately, sauces like soya, oyster, blackbean and other bottled condiments are an integral part of the Chinese meal and they would be sadly missed if Chinese patients were asked to omit them completely. (A Chinese meal without soya sauce would not be a meal at all to most Chinese people).

Table 7.6 Examples of Foods Advised by Dietitians for Hypertension

Hypertension	Food Groups	Examples of foods	
		English	Chinese
Avoid	Excess salt	---	Bottled sauces, dried fish, dried, salted vegetables, MSG, tinned foods
	Processed foods	---	Instant noodles, white rice
Consume	High fibre	Brown flour	Bamboo shoots, brown rice, sprouted beans, wholewheat noodles
	Miscellaneous	---	Plain foods

Since dairy produce (which can provide substantial amounts of sodium in the diet) are not major contributors of sodium in the Chinese diet, it may not be necessary to advise patients to completely cut out these bottled condiments, rather they should be asked to limit their intakes.

According to folk classifications, hypertension has been attributed to an excess of "hot" energy in the body (Koo, 1984) which means that "hot" foods would be decreased and "cold/cooling" foods increased. From the dietary advice given, there appears to be congruence between western and Chinese management of the disease with "cooling/cold" foods like fruits, vegetables, sprouted beans and bamboo shoots forming the basis of the diet. Patients may however believe there to be a contradiction in advice as regards choosing "plain foods". These together with instant noodles and white rice are generally considered as being "neutral". Since "neutral" foods are not thought to have any "heating" or "cooling" effects their intake would normally be maintained.

7.7.3 Constipation, Diverticulitis and Haemorrhoids

From folk classifications, constipation, diverticulitis and haemorrhoids are thought to be caused by an excess of "hot" energy in the body (Koo, 1984). Dietary prescriptions would advocate avoidance of "hot" foods and consumption of "cold/cooling" foods.

Table 7.7 Examples of Foods Advised by Dietitians for Constipation, Diverticulitis and Haemorrhoids

Constipation, Diverticulitis, Haemorrhoids	Food Groups	Examples of Foods	
		English	Chinese
Avoid	Processed foods	---	Instant noodles, white rice
Consume	High fibre	Brown flour, fruit, vegetables	Bamboo shoots, brown rice, sprouted beans, wholewheat noodles
	Fluids	---	---
	Pulses/ Legumes	---	---

From the dietary advice which dietitians reported giving, there appears to be agreement between Chinese and western management of these diseases with western management requiring adherence to a high fibre diet i. e. increase in fruit ("cool/cold"), vegetables ("cool/cold"), pulses (mostly "neutral", "cool/cold") and legumes (mostly "neutral", "cool/cold").

7.7.4 Gallstones

According to folk classifications, gallstones like constipation, diverticulitis, haemorrhoids and hypertension are also believed to result from an excess of "hot" energy in the body (Koo, 1984). There appears to be congruence between western and Chinese management with dietitians advising avoidance of "hot" foods like deep-fried, fried foods, Chinese sausage spring rolls, peanut oil and fatty meat and consumption of "neutral" and "cooling" foods like chicken, and fish. Choosing lean meat however may present a problem since most are classified as being "hot/warm".

Table 7.8 Examples of Foods Advised by Dietitians for Gallstones

Gallstones	Food Groups	Examples of Foods	
		English	Chinese
Avoid	Excess fat	Deep fried, fried foods	Chinese sausage, fried foods, peanut oil, spring rolls
	Meat	Fatty meat	---
	Miscellaneous	Large meat portions	---
Consume	Meat/Fish/ Poultry	Chicken, fish, lean meat	---
	Miscellaneous	---	Fat-free soups

7.7.5 Asthma, Coronary Heart Disease and Overweight

For coronary heart disease, amongst the foods which dietitians reported discouraging patients to eat lie a few items which appear to be quite 'harmless' like bamboo shoots and soups (Appendix 7.7). Bamboo shoots (raw) are low in fat (0. 3g/100g) and energy (28kcal/100g)(Tan, Wenlock, Buss, 1985) and so should be ideal for patients with the disease.

Traditionally, asthma, CHD and overweight do not have a classification based on energy imbalance. Rather CHD has been attributed to an excess of other lifestyle factors like stress and anger (Koo, 1984); overweight to an excess consumption of foods; and asthma as a result of cold/flu (see Appendix 7.7 for foods advised by dietitians for asthma and overweight).

7.8 Dietary Compliance

Adherence to dietary regimens has been estimated to be 30% with a range of 13 to 75% (Glanz, 1981, Haynes 1979). These figures suggest that some individuals abandon prescribed diets completely. In this study, 30% (10) of dietitians who saw Chinese patients reported experiencing difficulties in obtaining dietary adherence Besides the language barrier, specific problems arose during certain dietary regimens: A) Respondents (5 - 15%) reported experiencing difficulties in persuading their diabetic

Chinese patients to avoid and/or stop the use of sugar; to change to a high fibre diet and to restrict the quantity of foods eaten

B) For reducing diets, coaxing obese Chinese patients to restrict the quantity of foods eaten posed problems for 3 (9%) dietitians and

C) For low protein, low sodium diets, 2 (6%) dietitians reported finding difficulty in persuading their Chinese patients with renal problems to reduce the sodium content of their diet and also to decrease their meat consumption.

In cases where patients of Chinese ethnic origin kept follow up appointments to see dietitians, over a half of those advising clients replied that their patients did comply with the dietary regimens prescribed. Of the 8 dietitians who did not obtain dietary adherence at follow up, the following reasons were put forward by them as important factors affecting non compliance.

Table 7.9 Factors Which Dietitians Reported As Affecting Non Compliance

Factors Affecting Non-Compliance	Number	% (N=8)*
Communication problems	8	100
Unfamiliar foods advised	3	37
Poor interpreting by relatives	2	25
Lack of motivation on the patients part	1	13
Certain family customs prevented compliance	1	13
Total	15	
* Column adds up to >100% because respondents could give more than one answer		

It was expected that dietitians practising in London as compared with those in the Midlands area, Scotland or Wales might report experiencing more difficulties in obtaining adherence to a specific dietary regimen from their Chinese patients. Probably because London holds more pastry shops, restaurants etc. , and the temptation to consume 'forbidden' foods would be greater. Results indeed showed that dietitians in London were more likely to report experiencing difficulties with compliance than their counterparts in Midlands, Scotland and Wales although this was not significant. Interestingly, of the 3 dietitians located in Scotland who reported giving advice to Chinese patients all 3 claimed that they had obtained 100% dietary compliance from their clients!

Results obtained in this study shows that most commonly, unfamiliar foods are advised to patients. For example, in conditions which require the use of high fibre foods like constipation, haemorrhoids, diabetes, food items like wholewheat noodles, brown rice and brown flour were given as examples of Chinese foods to consume more of. Although white rice and noodles are familiar foods in the Chinese diet their unrefined versions are by no means familiar. The lack of proper examples of Chinese foods given may indeed contribute to poor compliance.

7.9 Problems in Giving Dietary Advice

7.9.1 Communication

The majority (32 - 98%) of dietitians who reported advising Chinese patients had some experience of using an interpreter (usually a relative). In addition, of these 32 dietitians, 2 dietitians reported relying on the services of Chinese doctors and qualified interpreters for translating advice.

One dietitian reported that problems did arise when children interpreted medical details for their parents, their lack of knowledge making a full translation impossible. Even using an adult member of the family to interpret details was reported by 3 dietitians to present problems. All 3 said that an increased length of time was required for consultation and that explanations of advice was usually translated in 'two words' which meant that much was lost in interpretation. Another respondent reported encountering difficulties in giving advice when interpreters from a different social class to the patient was used. She reported that words or phrases often did not appear to be fully understood by either party, partly because sometimes the dialect used was different.

It would appear that although dietitians did report experiencing difficulties in using interpreters, the majority of them still believed the numbers to be sufficient. When asked if the number of Chinese interpreters were sufficient for translating needs, 49% (43) replying to the questionnaire said Yes, 30% (26) No, and 21% (19) did not know.

7.9.2 Teaching Methods Used to Advise Chinese Patients

Since language difficulties are quoted as a common problem encountered when advising Chinese patients, communication could be improved by using an interpreter together with dietsheets in Chinese, leaflets and other audiovisual aids like slides, posters and charts.

Table 7.10 shows the teaching methods and materials which dietitians in this study reported using to advise their Chinese patients.

Table 7.10 Teaching Methods and Materials Used to Advise Chinese Patients

Teaching Methods and Materials	Number	% (N=33)
Advice given in English	26	79
Adive given in English via an interpreter	21	64
English dietsheets	23	70
Chinese dietsheets	6	18
English leaflets	13	40
Chinese leaflets	0	0
Audiovisual aids in English	3	9
Audiovisual aids in Chinese	1	6
Other	4	15
* Column adds up to more than 100% because respondents could give more than one answer		

The majority of the dietitians (79% - 26) said they advised their Chinese patients in English, of these 64% (17) reported that they related their advice via the use of an interpreter. 70% (23) said they presented their patients with English dietsheets for use at home. No dietitian reported using Chinese leaflets, a few (18% 6) reported using Chinese dietsheets and audiovisual aids in Chinese (6% - 2). This meant a heavy reliance was placed on verbal instructions in English and good interpreting by either relatives or qualified interpreters.

7.10 Health Education

Over a half of dietitians (19 - 58%) who reported advising Chinese patients replied that they believed supplies of health education material were inadequate and considered the following topics as lacking.

Table 7.11 Topics Reported by Dietitians to be Lacking in Health Education Materials

Topics Lacking in Health Education	Number	% (N=19)*
All areas	10	53
General nutrition	3	13
Dietsheets for diabetics	2	8
Dietsheets for the elderly	2	8
Weaning foods for the under 5's	2	8
Dietsheets for hypertensive patients	1	4
Dietsheets for the obese	1	4
Dietsheets for antenatal care	1	4
Dietsheets for cancer patients	1	4
Information on what NHS has to offer	1	4
Total	24	
* Column adds up to >100% because respondents could give more than one answer		

7.11 Hospital Provision of Ethnic Meals

Over a half (60% - 53) of the total dietitians responding to the questionnaire said that alternative menu choices were available for ethnic minority patients at their hospitals. Table 7.12 shows the distribution for each ethnic minority group.

Table 7.12 Meals Provided for Ethnic Groups

Ethnic Group	Number	% (N=53)*
Asian	30	34
Jewish	16	18
West Indians	6	7
Chinese	5	6
Total	57	
* Column adds up to >100 because respondents could give more than one answer		

Asian patients appeared to be catered for in over a half of the hospitals where dietitians worked, patients of Chinese and West Indian origin seemed to fare the worst.

Since the response to provide ethnic minority meals depends largely on the size of the local ethnic minority population, it was expected that hospitals in London would be more likely to provide meals for their ethnic minority patients since the size of the indigenous population of people from different countries is greater than for the rest of the country. However, there was no significant difference between whether hospitals were in London, Scotland, Midlands area or Wales and alternative menus being provided.

Of the remaining hospitals that did not cater for ethnic minority patients in their menu choices, 39% (34) of dietitians replied that familiar foods were allowed to be brought in from home whilst 1% (1) replied that the decision depended on the consultant in charge.

In the 34 cases where familiar foods were allowed into hospitals, 30 (88%) dietitians reported encountering some difficulties in obtaining dietary compliance from Chinese patients on prescribed diets. The most common problem was reported to have been inappropriate foods brought in by relatives.

Table 7.13 Difficulties in Obtaining Dietary Compliance

Difficulties	Number	% (N=30)*
Inappropriate foods brought in	22	73
Both hospital meals and meals from home are eaten	6	20
Inaccurate portion sizes particularly carbohydrates	3	10
Foods from home cannot always be heated	2	7
Excess use of fats in meals brought in from home	2	7
Unknown fat content of diet	1	3
Too high calorie foods	1	3
Hygiene problems with home foods	1	3
Total	38	
* Column adds up to >100% because respondents could give more than one answer		

As regards whether dietitians thought that eating arrangements were satisfactory for Chinese patients, 64% (53) of dietitians replying to this question believed they were. Of the remaining respondents who did not think eating arrangements were satisfactory, the following responses were obtained as to what areas they believed ought to be improved.

Table 7.14 Areas Which Dietitians Reported As Requiring Improvement With Regards To Eating Arrangements for Chinese Patients

Areas	Number	% (N=23)*
More choice, better arrangements to cater for Chinese patients	7	30
Foods traditional to the Chinese patients should be provided	4	18
Greater awareness and knowledge of Chinese dietary patterns	3	13
Better regimens for diet cooks to use in the diet bay	2	9
All areas	1	4
Prepared cook-chill meals should be made available	1	4
Basic Chinese menus to operate from when required	1	4
More use of noodles and varieties of foods	1	4
Financing the service to make better provision arrangements	1	4
Provision of light, tempting and acceptable meals	1	4
Total	22	
* Column adds up to >100% because respondents could give more than one answer		

There was a greater tendency for dietitians in Scotland as compared with those in Midlands area, London and Wales to believe that eating arrangements were satisfactory for Chinese patients although this difference was not significant. Maybe the dietitians in Scotland see so few Chinese that they see no need for familiar foods to be provided on

the hospital menu. Also, in Scotland, it is more common for familiar foods to be brought in from home (82%) of the hospitals in Scotland where dietitians worked permitted foods from home to be brought in) hence the need for 'special' hospital foods is not so great.

7.12 Wish For More Information about the Chinese community

The following table shows encouragingly that 86% or more of dietitians replying to the questionnaire do want to know more about the Chinese.

Table 7.15 Wish for More Information

Do Dietitians Want to Know More About	Yes	No
Chinese eating habits	88%	12%
Traditional Chinese ideas about diet and health	93%	7%
Patterns of ill health among the community	86%	14%

7.13 Summary

One of the main features of the Chinese community in Britain is that it is scattered, so it was not surprising that only 38% of the total dietitians replying to the questionnaire reported advising Chinese patients. The most common problems requiring dietary advice were diabetes and obesity. Since dietary advice forms an important part of both preventive and curative health care, to be effective, this advice must be closely related to what people normally eat and like. In a multiracial society, the dietitian needs to be informed about traditional diets of families and individuals from different communities in order to give effective support and advice.

Characteristics of the dietary regimen play an important role in adherence. If unfamiliar foods are advised then patients will find difficulty in fitting the regimen into their daily routine. The general lack of knowledge about the Hot-Cold concept used in traditional Chinese medicine and Chinese foods is well exemplified in Tables 7.5-7.8 and Appendix 7.7. These are obviously major obstacles to obtaining greater dietary adherence particularly if Chinese patients still hold to traditional ideas. If dietitians lack the basic knowledge about their patients' views on disease aetiology (based on Hot-Cold

concept) and the appropriate treatment, the 'correct' and familiar foods will not be advised to patients who need instructions.

To improve dietary adherence, specific food examples should be given for each food category advised for instance in diabetes "sweet sticky dishes" should be qualified by adding specific foods like egg tarts and mooncakes.

Insufficient examples may play a part in the next problem. Lack of motivation on the patients' part may well be due to the fact that they simply do not understand the instructions given to them. Certainly, if unfamiliar foods are advised, patients will lack motivation a) to change their diet and b) if they were to want to change, access to such foods may be limited especially if they live in areas where their own community predominate (and hence will only have Chinese food shops for example in Soho).

It is obviously unrealistic to expect 100% adherence to dietary changes everyday of the week but the problem here is probably difficulty in persuading patients to change just one day of the week.

Comprehension and recall by the client of advice plays an equally important role in obtaining dietary adherence. Factors influencing comprehension include the emotional state of the client, excessive anxiety on the patients part due to non understanding because of the language barrier will interfere with cognitive processes; supersaturation with recommendations to the client via an inexperienced interpreter will decrease recall. Care must be exercised when selecting interpreters for translating. Ideally, the interpreter (either a patient advocate or qualified interpreter should be fluent in English and the patients' dialect, have some medical knowledge, pay attention to detail, can translate fine areas of meaning and explain things to both dietitian and patient when needed.

Going on to the area of hospital foods, someone ill in hospital is least likely to be able to cope with new foods; they need the comfort of food that is familiar and soothing. The foods provided on the normal hospital menu is often unfamiliar and may be forbidden.

How different NHS institutions respond to this situation will depend very much on the size of local ethnic minority populations, their cultural and religious backgrounds and the differences between their normal diet and the standard British diet on which hospital menus are based. An increasing number of hospitals are providing meals for Asian patients, but few are yet catering for other groups, whose standard diets may be equally different.

Problems are obviously going to be encountered if foods from home are brought in for patients who have to follow a specific dietary regimen. Complete solutions to these problems will probably never be resolved but as two dietitians suggested, relatives should always be seen and advised about appropriate foods to bring in. Difficulties may arise when distant relatives visit. It is often the Chinese tradition that only the immediate family is informed of the actual illness so inappropriate foods are bound to be brought in.

Since the response to provide different meals for ethnic patients depends on the size of the local ethnic minority population and the differences between their normal diet and the standard British diet, provision of an ethnic Chinese meal would probably never happen. The size of the Chinese community in any one area is small compared to that of the indigenous population and the difference between the Chinese and British diet is great. Even if some hospitals decided to include a 'Chinese' dish in each meal, it may be unacceptable to those for whom it is intended. Since economically it is not viable to employ a Chinese ethnic cook on a full time basis if the number of Chinese patients are small, the cook if he/she is employed would probably come in for perhaps one or two days and week, cook a batch of different Chinese meals and freeze or chill them until required. Unfortunately, since the main principle of the Chinese diet is its freshness, reheating an already cooked and then chilled dish would lo se its Chinese characteristics and probably would not be acceptable to a Chinese patient. Also the length of time the food has to sit on a trolley before its taken up to the ward would affect the 'Chineseness' of the dish (ie: soggy Chop Suey).

Eating arrangements could probably be improved for ethnic minority patients in all areas of the country. However, in areas where the number of Chinese patients admitted to hospitals is very small, it would seem that the best solution would be for members of the family to bring in foods from home for the patient to eat (checked if on measured diets). This suggestion although the simplest is by no means the fairest as the NHS is supposed to provide a comprehensive range of health services to the whole population on the basis of individual need, a service free at the point of delivery and equal for all. If relatives have to bring in foods from home for their sick, it would appear that the service is not free and certainly not equal for all.

CHAPTER 8

A STUDY OF CHINESE AND CAUCASIAN DOCTORS IN BRITAIN

CHAPTER 8

A STUDY OF CHINESE AND CAUCASIAN DOCTORS IN GREAT BRITAIN

8.1 Aims and Objectives

The aim of this study was to examine the awareness and knowledge of doctors concerning Chinese ideas about diet and health; management of Chinese patients and views about the provision of service within the National Health Service (NHS) to ethnic Chinese patients

This study was designed to achieve the following objectives:

1. To investigate the perception of Chinese and Caucasian doctors in Britain concerning the persistence of traditional ideas about diet and health amongst their Chinese patients
2. To explore the knowledge of Chinese traditional practices among Caucasian doctors
3. To explore the extent to which Chinese and Caucasian doctors modify advice to accommodate their patients' views based on traditional ideas
4. To examine the patterns of disease among Chinese patients
5. To examine the views of Chinese and Caucasian doctors on the provision of service for Chinese patients by the NHS.

8.2 Methods of Data Collection

The Postal Survey Procedure (Moser, 1969; Oppenheim, 1986) was chosen to conduct the study because it was considered to be the most economical method for reaching a large sample located in a wide geographical area. Also respondents could consult patient records and other documents at their leisure if necessary.

Although the main limitation to this type of survey method is low response, several points were considered to overcome this problem. The covering letter (Appendix 8.1) which accompanied the questionnaire described the aims of the project and how the addressee came to be selected. It also included the assurance of anonymity and confidentiality and stressed the importance of obtaining their cooperation in order to promote greater understanding between ethnic Chinese patients during contact with health service personnel. A stamped addressed envelope was enclosed to increase the response rate.

A structured questionnaire (Oppenheim, 1986) was designed to maintain what Festinger and Katz (1953) call 'respondent orientation'. The questions were kept as simple and as straightforward as possible with the help of printed instructions. Although it was expected that the respondents would peruse the questionnaire before attempting to answer, the order of questions was nevertheless still considered important, so it was decided to start the questionnaire with a few simple questions.

When the returns began to decline about 6 weeks after the initial mailing, a reminder (Appendix 8.2) was sent to those who had not returned the questionnaire. After a further 4 weeks, a second copy of the questionnaire was sent, together with the original covering letter and the reminder.

8.3 The Population and the Sample

Chinese Doctors

To be selected for study, subjects were required to be of Chinese ethnic origin and registered in the current edition of the Medical Directory (1987).

The names, addresses, sex, region of the country and date at registration of respondents were collected by alphabetically searching through the two volumes of the Medical Directory for Chinese names. As a result, a list of 375 Chinese doctors was drawn up. This was subsequently divided up into area of residence in the following regions of the country - London, Midlands, Scotland, Wales and rest of UK.

Caucasian Doctors

A list of 375 Caucasian doctors matched for region of the country, sex and date of registration in the Medical Directory with the 375 Chinese doctors was drawn up in the following way:

1) After dividing the list of 375 Chinese doctors into residence within London, Midlands, Scotland, Wales and rest of GB, a note was then made of the number of males and females and their dates of registration within each of the above areas.
2) A non-repeated random number table based on the number of pages in the Medical Directory was generated using a Basic programme.
3) This table was used for the systematic selection of 375 doctors with each number corresponding to a page in the Medical Directory. Once located, each page was examined for subjects with a Caucasian sounding surname matched for region of the country, sex and date of registration with the Chinese doctors.

8.3.1 The Pilot Study

When the pilot questionnaires had been formulated (Appendices 8. 3, 8. 4), the study was carried out by mailing questionnaires to 25 Chinese and 25 Caucasian doctors distributed equally in London, Midlands, Scotland, Wales, and rest of UK. The response rate for the pilot study was 52% for the Chinese and 48% for the Caucasian samples and indicated that similar rates could be expected for the main survey. Some modifications to the questionnaire had to be made before the main study was conducted.

8.3.2 The Main Study

Questionnaires (Appendices 8.5, 8.6) were posted to the remaining 350 Chinese and Caucasian doctors in the original list compiled from the Medical Directory.

8.3.3 The Questionnaire

The main survey questionnaire was divided into 7 sections for both Caucasian and Chinese doctors.

Sections 1-4 examined

1) the type of patients treated,

2) patient management,

3) doctors' views on traditional Chinese medicine and

4) the persistence of traditional ideas among patients.

Sections 5-6 in the Chinese doctors study explored

5) the adaptation of advice by respondents and

6) problems experienced by patients during contact with the NHS and doctors views on provision of service to Chinese patients by the NHS.

Sections 5-6 in the Caucasian doctors study examined

5) doctors views on provision of service to Chinese patients by the NHS and

6) the awareness and knowledge of the Hot-Cold concept as used in Chinese medicine.

The final section in both questionnaires sought information on some personal characteristics of respondents in both samples.

8.4 Data Processing and Statistical Analysis

Since the questionnaire contained some open-ended questions, numerical codes could not be assigned at the outset because the range of possible answers was unknown.

Consequently, at the end of data collection, a listing of responses was drawn up and a coding frame devised and each answer given a numerical code.

All codes were then transferred onto take-off sheets and entered for statistical analysis onto a computer data file using SPSSx and Minitab at the KQC Computer Centre. The statistical significance of relationships between certain sets of variables were determined by Chi-Square analysis (Relationships were considered statistically significant at the 0.05 level).

8.5 Characteristics of Respondents

Of the 350 questionnaires initially mailed out to each of the 2 groups, 172 were returned by Chinese doctors giving a response rate of 49%, while 140 Caucasian doctors replied giving a response rate of 40%.

Table 8.1 Responses to the Questionnaire

Mailings	Chinese		Caucasian	
	Returned	% Response Rate	Returned	% Response Rate
1st mailing	132	38	117	33
1st reminder	29	8	14	4
2nd reminder	11	3	9	3
Undelivered	26		18	
Total (Usable)	172	49	140	40

As compared to typical response rates for general postal questionnaires of 40% to the first mailing and 60% after 3 mailings (Dillman, 1978), the response rates were poor.

Telephone calls were made to 10 Chinese and 10 Caucasian doctors selected at random who had not replied to the questionnaire. Reasons given for not returning included lack of time to look up patient records and inability to answer questions because doctors had never advised Chinese patients before or just simply lack of interest in the subject matter.

Other explanations for the low response rate could be that some questionnaires were never returned because doctors had moved away and present occupants failed to return the questionnaires to the researcher or redirect them.

Of the total questionnaires returned, 78 (45%) Chinese doctors compared with 50 (36%) Caucasian doctors reported treating patients of Chinese ethnic origin. These then formed the basis of the rest of the analysis.

Table 8.2 Treatment of Chinese Patients by Region

Region	Chinese	Caucasian
London	22 (28%)	19 (38%)
Midlands	18 (23%)	8 (16%)
Scotland	6 (8%)	7 (14%)
Wales	2 (3%)	1 (2%)
Others	30 (38%)	15 (30%)
Total	78 (100%)	50 (100%)

A brief description of some personal characteristics of respondents treating Chinese patients are illustrated in Table 8.3.

Table 8.3 Personal Characteristics of Doctors

Personal Characteristics	Chinese		Caucasian	
	Number	%	Number	%
Age Group				
Under 35	36	46	18	36
Over35	39	50	22	44
No answer	3	4	10	20
Sex				
Male	57	73	31	62
Female	19	24	11	22
No answer	2	3	8	16
Total	78	100	50	100

Table 8.3 shows that respondents from the Chinese sample were evenly distributed between the 2 age ranges and that the Caucasian respondents (who were chosen to match for dates of registration as an indirect indicator of age) were reasonably well matched.

Most of the Chinese respondents were born in Hong Kong and educated in the United Kingdom and so were able to converse in Cantonese as well as other Chinese dialects (Appendix 8.5).

8.6 Patients' Characteristics

From Table 8.4, it can be seen that both Chinese and Caucasian respondents reported that the majority of their Chinese patients originated from Hong Kong although Caucasian doctors appeared to be advising more UK-born and Mainland China-born Chinese patients.

Table 8.4 Patients Country of Origin

Country of Origin	Chinese		Caucasian	
	Number	% (N=77)*	Number	% (N=37)*
Hong Kong	63	67	30	48
Malaysia	13	14	11	17
Other	11	12	3	5
United Kingdom	5	5	11	17
Mainland China	2	2	8	13
Total	94		63	
* Columns add up to more than 100% because respondents could give more than one answer				

More Chinese doctors (76% - 59) reported treating older Chinese patients (over 50 years old) than Caucasian doctors (42% - 21) which would suggest that elderly Chinese prefer a Chinese doctor who could be expected to communicate more easily and understand their point of view. The most commonly reported problems requiring treatment were diseases of the cardiovascular system, connective tissues, alimentary tract, respiratory system, endocrine/metabolic systems and psychiatric disorders (Table 8.5).

Table 8.5 Most Commonly Reported Problems which Chinese Patients (>50 years) Presented with

Problems	Chinese Doctors		Caucasian Doctors	
	No	% (N=57)*	No	% (N=18)*
Cardiovascular diseases	21	37	3	17
Connective tissue diseases	20	35	1	6
Alimentary diseases	17	30	4	22
Respiratory diseases	13	23	3	17
Endocrine/Metabolic diseases	13	23	2	11
Psychiatric disorders	11	19	1	6
Eye diseases	9	16	1	6
Skin diseases	7	12	2	11
Neurological problems	6	11	0	0
General medical problems	5	9	3	17
Kidney diseases	5	9	0	0
Minor ailments	3	5	0	0
Neoplastic diseases	3	5	0	0
Blood disorders	1	2	0	0
Infections	1	2	0	0
Liver/biliary diseases	1	2	0	0
Nasopharyngeal cancer	1	2	1	6
Surgical problems	1	2	0	0
Dental problems	1	2	0	0
Drug addiction	1	2	0	0
Elective surgery	1	2	0	0
Gynaecological problems	1	2	0	0
Hearing loss	1	2	0	0
Post menopausal syndrome	1	2	0	0
Sore throat	1	2	0	0
Others	1	2	0	0
Menopausal problems	0	0	2	11
Asthma	0	0	1	6
Rhinitis	0	0	1	6
Total	153		25	

** Columns add up to >100% because respondents could give more than one answer*

Some of these problems are mentioned as health problems affecting the Chinese Community in the 1985 House of Commons Home Affairs Committee Report on the

same in Britain. The list given by the Chinese doctors appeared to cover a wider spectrum of conditions as compared with that from the Caucasian subjects,

Interestingly the results picked up on a disease which is peculiar to the Chinese community and mentioned by 1 Chinese doctor and 4 Caucasians - nasopharyngeal cancer.

8.7 Patient Management

A minority of both Chinese (44% - 34) and Caucasian (24% - 12) respondents had referred Chinese patients to a dietitian. The conditions for which referrals had been made are shown in Table 8.6.

Table 8.6 Conditions For Which Referrals Are Made To Dietitians

Conditions	Chinese Doctors		Caucasian Doctors	
	No	% (N=35)*	No	% (N=15)*
Diabetes mellitus	30	86	12	80
Obesity	14	40	7	47
Renal problems	7	20	1	7
Hypertension	5	14	1	7
Constipation	4	11	4	27
Gallstones	3	9	0	0
Anaemia	2	6	1	7
Stomach cancer	2	6	0	0
Diverticulitis	2	6	1	7
Coeliac disease	1	3	0	0
Cancer	1	3	0	0
Hepatitis	1	3	0	0
Hyperlipidaemia	1	3	2	13
Liver diseases	1	3	0	0
Skin problems	1	3	1	7
Underweight	1	3	0	0
Allergies	1	3	0	0
Undernutrition	1	3	1	7
Total	77		31	

* Columns add up to >100% because respondents could give more than one answer

Forty-four (56%) of Chinese doctors reported that they had never referred their patients to see a dietitian. Of these, 19 said that the need had not arisen so far, whilst the remaining 25 said that they would not consider referrals because of the likelihood of communication problems between patients and dietitians. However, more importantly, they felt that Western dietitians lacked knowledge on Chinese foods and so would not be able to provide comprehensive dietary advice as compared to the respondents themselves.

When subjects were asked what other conditions they felt would require dietary advice, both Chinese and Caucasian respondents were able to quote a large variety of conditions.

Table 8.7 Other Conditions for which Doctors would give Dietary Advice

Conditions Given by Chinese and Caucasian Doctors	Chinese Doctors Only	Caucasian Doctors Only
Allergies	Acne	Alcoholism
Cardiovascular disease	Asthma	Angina
Failure to thrive	Antibiotic	Convalescence
Gout	Growing children	Cystic fibrosis
Irritable bowel syndrome	G-6-P-D-Deficiency	Diarrhoea
Lactation	Liver disease	Dyspepsia
MAOI Treatment	Pancreatic	Heartburn
Migraines	insufficiency	Infants
Osteoporosis	Phenylketonuria	Influenza
Peptic ulcer	Post-operative	Oral contraceptives
Pregnancy	conditions	Pancreatitis
Vegetarian/vegans	Premenstrual syndrome	Tropical sprue
Urticaria	Rickets	
	Vitamin deficiency disease	

8.8 Awareness of the Persistence of Chinese Traditional Ideas About Diet and Health Amongst Patients

Chinese doctors appeared to be far more aware of the possibility that their patients might be using alternative forms of treatments. Forty-five (58%) Chinese doctors compared with 17 (34%) Caucasian doctors reported that their patients used alternative treatments. The rest of the Chinese (33 - 42%) respondents said that their patients did not report trying other forms of treatment whilst the remaining 57% (23) of Caucasian subjects reported that they simply did not know what their patients used.

Table 8.8 shows that a larger proportion of Caucasian respondents reported that their Chinese patients used proprietary western medication than their Chinese counterparts.

Table 8.8 Patients' Use of Other Remedies

Other Remedies	Chinese		Caucasian	
	Number	% (N=45)*	Number	% (N=17)*
Herbal remedies	31	69	9	53
Food remedies	30	67	4	24
Proprietary western medicine	10	22	10	59
Total	72		23	
* Columns add up to >100% because respondents could give more than one answer				

This illustrates what doctors perceive patients to be doing. Caucasian doctors using a western frame of reference believed patients go to the chemist when ill whilst Chinese doctors were probably more aware that herbal and/or food remedies were more likely to be used. As mentioned previously, 76% (59) of Chinese doctors reported seeing Chinese patients over 50 years old compared with 42% (21) in the Caucasian sample. It is probable that patients preferring herbal and/or food remedies belong to this older age group. It is also likely that younger patients particularly those brought up in a western frame of reference are more inclined to use proprietary western medicine for self medication rather than traditional remedies. Table 8.9 illustrates the conditions during which doctors were aware of patients using either food or herbal remedies as part of their own treatment. Again the list given by Chinese respondents covered a wider spectrum of diseases. This suggests that Chinese patients commonly used food and herbal remedies to alleviate diseases of the alimentary tract, connective tissues and respiratory system, migraine headaches and asthma.

Table 8.9 Problems For Which Doctors Were Aware Of Patients Using Food Or Herbal Remedies

Problems	Chinese		Caucasian	
	Number	% (N=32)*	Number	% (N=10)*
Alimentary tract diseases	12	38	2	20
Connective tissue diseases	10	31	3	30
Respiratory diseases	9	28	2	20
Infections	8	25	0	0
Skin diseases	6	19	1	10
All conditions	4	13	0	0
Eye diseases	2	6	0	0
"Burning" sensations of the body	2	6	0	0
Cardiovascular diseases	2	6	0	0
"Hot" illnesses	2	6	0	0
Blood disorders	1	3	0	0
Endocrine/Metabolic diseases	1	3	0	0
Hearing loss	1	3	0	0
Insomnia	1	3	0	0
Menorrhagia	1	3	0	0
Gynaecological problems	1	3	0	0
Period related problems	1	3	0	0
Neurological disorders	1	3	0	0
Sore throat	1	3	1	10
Kidney diseases	1	3	0	0
Asthma	1	3	2	20
Migraines	1	3	2	20
General	1	3	2	20
Cold	1	3	1	10
Catarrh	1	3	1	10
Total	68		17	
* Columns adds up to >100% because respondents could give more than one answer				

Concerning whether the persistence of traditional ideas held by Chinese patients affected the uptake of medical advice given and received, it appears that almost one third of patients (32% - 25) were reported by Chinese respondents to have question ed the appropriateness of treatments advised. In response, the majority (19) of these doctors said that they had tried to reinforce the traditional ideas but also suggested alternatives

if the treatment prescribed contradicted a patient's perception of the treatment of the disease.

8.8.1 Adaptation of Doctors Advice

Thirty-one (40%) Chinese doctors replied that they would adapt the advice given to their Chinese patients by carefully considering any differences in treatment and suggesting alternatives where relevant if it contradicted with the patients' beliefs about diet and health. There was a trend for doctors practising in London who were under 35 years old to be more likely to modify their treatment than their counterparts located in the Midlands area who are over 35 but this was not significant.

8.9 Views on Traditional Medicine

More Chinese (72% - 56) than Caucasian respondents (42% - 21) reported that they believed traditional practitioners of Chinese medicine and Chinese herbalists had a place in treating certain conditions.

Table 8.10 Problems For Which Doctors Believed Traditional Practitioner Might Have A Place In Treating

Problems	Chinese		Caucasian	
	Number	% (N=57)*	Number	% (N=18)*
Connective tissue diseases	37	65	2	11
Psychiatric disorders	7	12	2	11
Alimentary tract diseases	5	9	2	11
Neurological disorders	5	9	0	0
Infections	3	5	0	0
Respiratory diseases	3	5	0	0
Conditions not likely to be harmed	2	4	6	33
Lethargy	2	4	0	0
Skin diseases	2	4	3	17
Where western medicine has failed	2	4	1	6
Allergies	2	4	0	0
Cardiovascular diseases	1	2	0	0
"Hot" illnesses	1	2	0	0
Insomnia	1	2	0	0
Malaise	1	2	0	0
Nutritional deficiencies	1	2	0	0
Sore throat	1	2	0	0
Terminal illnesses	1	2	0	0
Weight loss problems	1	2	0	0
Non-organic problems	1	2	0	0
Certain self limiting diseases	1	2	3	17
Certain cancers	0	0	1	6
Homesickness	0	0	2	11
Fever	0	0	1	6
Total	80		23	
* Columns add up to >100% because respondents could give more than one answer				

Since Hong Kong contains a multitude of alternative medical 'shops' in the form of herbalists, acupuncture etc. , it was expected that due to greater exposure to these other forms of medicine and teaching from older relatives, Chinese doctors educated in Hong Kong would be more receptive to alternative approaches. However, it was surprising to note that doctors educated in Hong Kong were not more likely to think that herbalists or traditional practitioners had a place in medicine than those educated in other parts of the world. Perhaps an education in Western approaches to medicine be it in

Hong Kong or UK, pushed aside herbalists and traditional practitioners as being non-scientific. Male doctors were more likely to believe in alternative approaches than their female counterparts although the difference was not significant.

By far the most common health problem mentioned by Chinese respondents who would consider traditional medicine as a possible alternative was for connective tissue diseases like arthritis/rheumatism (Table 8.10). In contrast, Caucasian doctors were more sceptical of the benefits of traditional medicine and reported that they would only consider it as an alternative for "conditions which were not likely to be harmed", for skin diseases, certain self-limiting conditions and where western medicine had failed. Psychiatric and neurological disorders were mentioned by a few Chinese and Caucasian subjects.

8.10 Dietary Advice

Details of foods which Chinese and Caucasian doctors reported advising their patients to avoid and consume during certain conditions are given in Appendices 8.7 - 8.13.

8.10.1 Diabetes

For diabetes, the general advice given by both sets of respondents was for patients to avoid excess carbohydrates, restrict sugar consumption, avoid saturated fats, fatty foods and salty foods (Appendix 8.7). In conjunction, a high fibre diet was advocated by doctors together with chicken, lean red meat and fish. Specifically, both Chinese and Caucasian respondents reported advising their patients to eat more brown rice and brown bread, these items may cause concern for those being advised since neither are common foods in Chinese culture. Caucasian doctors actually quoted brown rice in the Chinese food column. The possible implications of including these foods have been discussed previously.

Although a large variety of diets were mentioned by Chinese respondents for Chinese patients to follow - low calorie, low carbohydrate, low fat, low protein, high protein and weight reducing, there seems to be a disagreement with the dietary guidelines proposed in 1982 by the British Diabetic Association for diabetic patients. A high fibre diet is now recommended rather than a low carbohydrate and high protein diet. This seems to suggest that either these doctors disagree with the BDA's advice or they are not up-to-date with the current recommendations.

8.10.2 Hypertension

As with diabetes, patients afflicted with this problem were advised by both Caucasian and Chinese respondents to avoid excess carbohydrates, sugar, saturated fats, fatty foods, salty foods and alcohol (Appendix 8.8).

It is interesting to note that "hot" foods were included in the list of Chinese foods given by Chinese doctors. This tends to suggest that respondents were aware that diseases are attributed to energy imbalance particularly, hypertension according to folk traditions is believed to be caused by an excess of "hot" energy in the body, avoidance of food categorised in the same polarised direction of the disease being essential.

Again, a high fibre diet including brown rice, brown bread were prescribed by both sets of respondents.

8.10.3 Constipation, Diverticulitis, Haemorrhoids

The general advice given by both sets of respondents was for patients to avoid saturated fats, processed foods and sugar (Appendix 8.9). Avoidance of spicy foods were also recommended for haemorrhoids and diverticulitis. Specifically, Chinese doctors advised the avoidance of chocolate, instant noodles and white rice.

In addition, a high fibre diet was advocated by both Chinese and Caucasian doctors which included vegetables and fruit. Chinese respondents also quoted bran, brown rice, brown bread, bananas, celery, spinach, Chinese cabbage, Chinese green vegetables and Kai Lan (Chinese mustard greens).

8.10.4 Anaemia

Only Caucasian doctors advocated an avoidance of saturated fats. Both sets of respondents however, recommended the consumption of foods rich in Vitamin B12, folate and iron like dairy produce, liver, meat, fish, green vegetables, fruits and cereals (Appendix 8.10). Chinese respondents in addition quoted pulses, legumes and chicken blood. The inclusion of chicken blood tends to suggest that Chinese respondents were aware of the principle of 'like helps like' and would advise their Chinese patients in this way if they considered it appropriate.

8.10.5 Gallstones

Both Chinese and Caucasian respondents recommended an avoidance of saturated fats and fatty foods, with Chinese doctors giving pork products, fatty pork, spring rolls

and fried wuntons as examples and Caucasian respondents fried foods as an example (Appendix 8.11). In addition, a decrease in alcoholic consumption was also recommended. Avoidance of sugar was mentioned only by Chinese respondents whilst only Caucasian doctors recommended a high fibre diet.

8.10.6 Stomach Cancer

An avoidance of alcohol was advocated by both sets of respondents with Caucasian doctors quoting spirits as an example (Appendix 8.11). Concurently, only Chinese doctors recommended avoidance of saturated fats and fatty foods such as roast pork, fatty pork, pork products and Chinese sausage. In addition, they mentioned avoidance of coffee, spicy foods and nitrite rich foods as well as consuming congee and soft foods eaten frequently in small amounts.

8.10.7 Rheumatism and Arthritis

Both Caucasian and Chinese respondents recommended avoidance of saturated fats, with Chinese doctors quoting animal products as an example (Appendix 8.11). In addition, both sets of respondents advocated an increase in the consumption of vegetables and fruits. Specifically, Caucasian respondents mentioned brown rice whilst Chinese respondents included fish oils, fish and chicken.

8.10.8 Coughs, Colds and Sore throat

Chinese and Caucasian respondents both recommended an increase in the fluid intake via the consumption of hot drinks and honey (Appendix 8.11). In addition, Chinese respondents also mentioned increasing vegetables and fruit intake, in particular, for sore throats, the avoidance of fried foods and hot, spicy foods were advocated. This again appears to suggest that Chinese respondents were aware that ailments are attributed to energy imbalance particularly, sore throat is generally believed to be a symptom of 'hot air' caused by an excess of 'hot' energy in the body, avoidance of foods (like spicy and fried foods) categorised in the same direction of the disease being essential.

8.11 Patterns of Treatment and Referral

The following figures illustrate the course of treatment prescribed by the majority of Chinese and Caucasian doctors for conditions. Basically patterns of treatment and

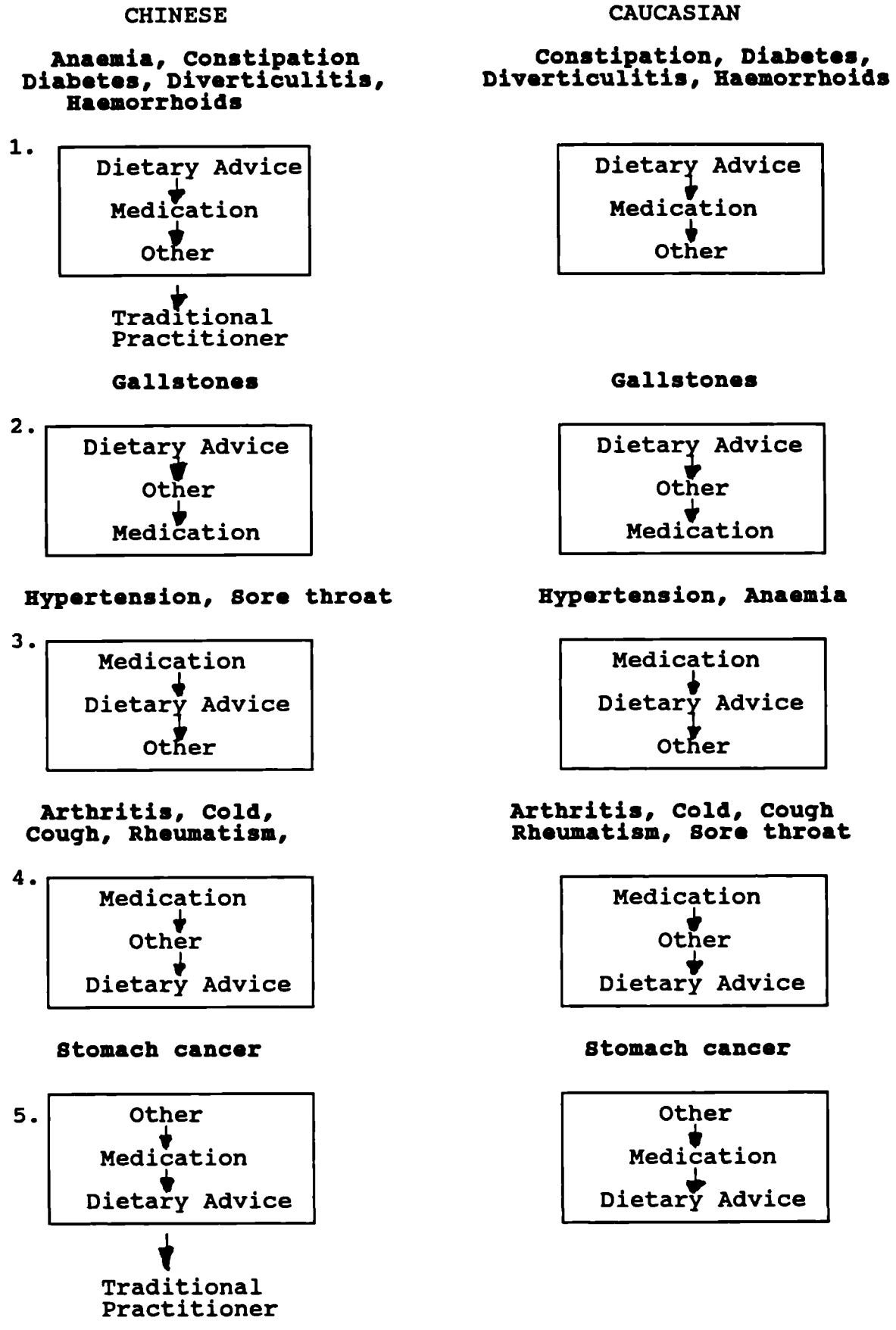
referral followed 5 routes. However, Chinese and Caucasian doctors did not necessarily identify the same route for a particular condition.

Dietary advice was considered a primary treatment in 2 pathways (1,2) for both Chinese and Caucasian doctors for diabetes, haemorrhoids, diverticulitis, constipation and gallstones but it occupies a position in all 5 routes which indicates its importance. Anaemia is included here by Chinese doctors.

Similarly, medication was advocated in all 5 paths, but only as a primary method of cure in 2 (3,4) for rheumatism, arthritis, cough, cold, hypertension and sorethroat in both samples and also coughs and colds in the Chinese study.

Consultation with a traditional practitioner in Chinese medicine was not considered as an alternative by Caucasian doctors in any of the conditions presented to them. Whilst Chinese doctors considered this as a last resort for 4 conditions (occupying routes 1,4,5) i. e. diabetes, rheumatism, arthritis, and stomach cancer.

Figure 8.1 Pathways of Treatment For Different Conditions



In both groups of respondents, the primary course of treatment for stomach cancer was referral to a hospital for further investigation/surgery. This treatment was considered also for patients afflicted with gallstones. Primarily for anaemia, Caucasian doctors preferred to investigate this condition before prescribing treatment.

8.12 Knowledge about Chinese Foods and Conditions

Over a third (38% - 19) of the Caucasian respondents considered that they were most familiar with the cultural and dietary rules of the Asian community, 24% (12) with Chinese, 22% (11) with West Indians, and 16% (8) with other communities (Cypriots, Jewish and British).

8.12.1 Classification of Food Items

Although 13 (26%) Caucasian doctors claimed familiarity with the hot and cold concept of foods as used in Chinese medicine, only 7 (14%) attempted the classification of the list of foods presented to them (See Appendix 8.12 for the list of the classification of foods).

There was a great deal of discrepancy in the degree of hotness or coldness ascribed to foods. In only 5 out of the 26 food items presented did a half or more of the respondents replying to the question agree with the traditional classification of foods (Anderson, 1980; Koo, 1976). Furthermore, there were some contradictions in categorising the "hotness" or "coldness" of foods, for example, boiled white rice generally classified as "neutral" was considered "cold" by some respondents.

8.12.2 Classification of Conditions

Only 6 (12%) Caucasian respondents reported that they were familiar with the Hot-Cold concept of conditions. Again, as with the classification of Chinese foods, a half of these respondents were not so familiar with the concept as to attempt the classification of the 19 conditions (compiled from Koo, 1984) presented to them (See Appendix 8.13 for the classification of conditions).

8.13 Problems in Advising Chinese Patients

Communication problems were listed by 21 (42%) Caucasian doctors as the most common difficulty when treating Chinese patients. Cultural differences coupled with differing dietary health beliefs and practices, as quoted by 8 (16%) respondents posed further barriers to patient-doctor communication.

8.14 Problems with NHS

More Chinese (35 - 45%) compared with Caucasian respondents (11 - 22%) reported that their Chinese patients had experienced problems with the NHS. This would tend to suggest a greater sensitivity to problems amongst Chinese doctors. Cross analysis of NHS problems within the regions of London and Midlands area showed that there was a difference although not significant, Chinese and Caucasian doctors practising in London were more likely to report that their patients experienced problems with the NHS than those living in the Midlands area of the country. Considering that London contains the largest settlement of the Chinese community in Britain, it appears that services to this population are inadequate. An obstacle to this partly lies within the Chinese themselves, since traditionally the race are taciturn about voicing their dissatisfaction about treatments among other things outside of their community.

Of the 35 Chinese doctors who reported that their Chinese patients had experienced problems with the NHS, the majority of them (28 - 80%) said that language difficulties was the main problem experienced by these patients. Communication problems were reported to have arisen particularly when registering with General Practitioners (GP) and also with members of hospital staff.

A larger number of Chinese (68% - 53) compared with Caucasian respondents (28% - 14) said that they believed more Chinese interpreters ought be employed by the NHS since the langauge barrier was one of the major obstacles to Chinese patients receiving effective health care.

Chinese doctors also reported that their Chinese patients were unable to ask for certain things or complain about hospital food because of the lack of interpreters coupled with unsympathetic staff. As with the indigenous population, Chinese doctors also reported that their Chinese patients had to endure the long waiting lists before any operations were possible.

8.15 Views on the Provision of Service for Chinese patients by the NHS

As regards whether doctors considered support services as being adequate for Chinese patients, 59% (46) of Chinese and 20% (10) Caucasian respondents believed that support services for the Chinese community were inadequate. In particular, the groups which the Chinese sample considered required extra support were non-English speakers but also included the elderly, socially isolated and patients with dietary problems (Table 8.11).

Table 8.11 Groups Which Chinese Doctors Felt Required Extra Help From The NHS

Groups Requiring Extra Help	Number	% (N=44)*
Non-English speakers	33	75
The elderly	13	30
Socially isolated	4	9
Those brought up with traditional ideas about diet and health	3	7
Patients with dietary problems	2	5
Arthritics especially children	1	2
People unaware of their rights	1	2
Psychiatric patients	1	2
Those faced with unfamiliar hospital foods	1	2
The illiterate	1	2
Patients about to undergo surgery	1	2
Those with differences in perception of disease causation	1	2
Patients remaining in their own community	1	2
People with no family support	1	2
Total	64	
* Column adds up to >100% because respondents could give more than one answer		

The majority of Chinese doctors (96% - 75) believed that health education material for the community were insufficient.

8.16 Summary

The majority of the Chinese population in this country originates from Hong Kong where the situation as regards health care is very different. In Britain, it is expected that people register with a general practitioner who is consulted for all health problems with most people choosing their doctors by geographical accessibility. In Hong Kong, the situation is quite different. It is common for a patient to consult a few doctors for the same problem, the Chinese there prefer to receive 2 or 3 opinions when sick. For several reasons it is quite impossible to continue this kind of practice here. Firstly, the language barrier is a great hindrance to a large number of Chinese who are unable to communicate in English. This renders the idea of 'shopping around' extremely difficult

since travelling is obviously restricted. Secondly, doctors do not take kindly to patients wanting to change from one doctor to another. It is therefore important for a patient to be able to register with a GP with whom he can communicate sufficiently to explain his ailments and understand the treatment he is receiving. The ideal situation is if the patient can register with someone who can speak his own dialect and understand his culture.

From the results, there seemed to be a difference on paper in the type of advice and treatment given by the 2 sample populations. Chinese doctors seemed to be more receptive to problems of their own community maybe because these doctors have been brought up in a setting where traditional ideas about diet and health have been practised. Communication may also play an important role in this respect, indeed communication problems was mentioned by 42% of Caucasian doctors as being the most common difficulty when treating Chinese patients. It is obviously difficult for Caucasian doctors to diagnose more complex symptoms if his patient cannot speak English and an interpreter has to translate the medical details. (Accuracy is difficult if the interpreter happens to be a child for example). From the list of conditions which elderly patients (over 50 years old) presented with (Table 8.5), it appears that the list produced from the Chinese sample covered a broader spectrum of diseases as compared with the Caucasian respondents. Also the conditions given by the Chinese doctors during which Chinese patients reportedly used traditional herbal or food remedies for self-help contains some culture-specific diseases like "hot illnesses", and "burning sensations of the body".

In general, whilst dietary advice given by Chinese and Caucasian doctors were nutritionally sound, the lack of specific examples of Chinese foods could well hinder the uptake of and compliance with the advice (See Appendices 8.7 - 8.13). Scientific terms may also compound this difficulty since many patients would not understand the terms 'cholesterol', 'potassium', 'PUFA' or 'iron'.

Coming to the question of familiarity and knowledge of the hot/cold concept as used in Chinese medicine, only a few Caucasian doctors had heard of the concept (this result was similar to that obtained in the dietitian study). Even fewer were familiar enough with the idea to codify the effects of certain foods in the body or classify conditions into their respective 'aetiological' categories. It is unrealistic to expect every doctor in the country to familiarize themselves with the different health beliefs and practices of the Chinese population in Britain if s/he does not treat any. However, for doctors who do treat such patients in particular patients over 50 yrs old, unable to communicate in English and most likely to have the traditional beliefs of health and

disease still ingrained in their minds, it is essential to have a doctor who has an idea of their patients culture and their response to illness.

From the results, there seemed to be a difference in the views of Chinese and Caucasian doctors as to the adequacy of service provision by the NHS to Chinese patients. A smaller percentage of Caucasian doctors considered support service and interpreters to be inadequate for the Chinese community in Britain. This might be explained by the fact that only a minority of Caucasian doctors reported treating Chinese patients over 50 years old. This implies that these respondents considered their other younger Chinese patients to have a sufficient command of the English language not to require interpreters and other support services.

Chinese doctors on the other hand, reported treating more Chinese patients over 50 years old. These respondents particularly considered non-English speakers and the elderly as requiring extra help form the NHs in the form of interpreters and health education materials translated into Chinese and greater access to other services. Perhaps in the future, health policy makers should consider providing extra help and support to those doctors particularly Chinese who treat a large number of Chinese patients.

CHAPTER 9
DISCUSSION AND AREAS FOR FUTURE RESEARCH

Introduction

9.1 General Discussion

9.2 Areas for Future Research

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DISCUSSION AND AREAS FOR FUTURE RESEARCH

Introduction

In recent years, there has been an expansion in the study of foodways as a dimension of ethnicity and the impact of migration on food habits. Although it is appealing to imagine that a systematic study of food systems can help us understand not only what people eat, but why, - in practice, research in this area is problematic.

A conceptual difficulty commonly experienced by those investigating the impact of migration on food habits, is separating the group-shared, internally coherent, socially transmitted cultural patterns of food use from both the food usages which respond easily to external pressures (such as household income and activity patterns) and those which respond to idiosyncratic individual preferences. It might be supposed that the impact of migration on beliefs and management of disease would constitute a particularly interesting focus for research since it represents a fairly well-defined dimension of food usage, as well as being commonly group-shared and socially transmitted. However, it has received relatively little research attention. The orientation of most research undertaken in the U.K. into the dietary patterns of various ethnic minority communities has been predominately clinical, seeking to untangle the dietary aspects of the aetiology of conditions like rickets, coronary heart disease and diabetes which are more common in some of these groups. In contrast, relatively little work has been done to explore the underlying factors which shape decisions about food, particularly the persistence of traditional ideas about the role of diet in the maintenance of health and management of disease and the implications of this for interaction with U.K. health professionals.

A number of authors (Homans, 1983; Tan and Wheeler, 1983) have documented the persistence of traditional dietary beliefs and practices in relation to the management of pregnancy and the puerperium amongst ethnic minority mothers in the U.K. A study of Greek-American mothers over three generations by Freedman and Grivetti (1980) suggests that such beliefs and practices during pregnancy may be more resistant to change than other aspects of food habits while Almeida (1989) reached a similar conclusion in her study of Cape Verdeans in Portugal. However, it is interesting that she noted a difference between the extent to which traditional ideas persisted during pregnancy, when mothers were likely to have received dietary advice form clinic staff and beliefs about

diet during lactation, which were less likely to be the subject of professional advice and traditional ideas showed even greater persistance.

Two small studies carried out among Asian diabetics (Khajuria, 1989 and Rahman, 1989) not only found widespread dietary recommendations for the management of their condition but also extensive use among the Bangladeshi group of foods like karela and neem. Patients reported that the advice received from the NHS staff seemed to show little awareness of their normal eating practices, let alone ideas on dietary management.

Yet since the work of Ackerknecht in the 1940's, it has been accepted that medical concepts should be understood as integrated aspects of culture, rather than as independent absolutes. However, Ackerknecht's ideas were originally based on the study of simple societies where most if not all members share one political, economic and religious reality. Clearly difficulties arise in trying to apply the "medicine as culture" approach to complex societies, a situation which is even further complicated by migration, just the situation which occurs in the case of Chinese migrants. In traditional Chinese medicine, we find a variety of differently conceptualised "health systems", partly overlapping and partly antagonistic. In all countries the history of medical thought is not characterised by a linear succession, in which old systems of thought are exchanged wholesale for new ones. Instead, a diversity of concepts may coexist. New ideas may be developed or introduced, while at the same time older views continue to have their practitioners and clients. Migration can provide a useful opportunity to examine some of the variables which lie behind the acceptance of some "new" ideas and rejection of others, when different systems are brought into contact with each other.

Attempts at comparing different systems of ideas in health care usually start from an assumption that man is confronted with a reality of illness and disease, and that some systems of thought have arrived at a correct explanation - while others have not. The standard approach is to consider the insights of one specific orthodox conceptual system as closest to the perceived truth and to investigate whether alternative explanatory systems can be reinterpreted in terms of the orthodox system. For example, Needham reinterprets the ancient Chinese text *Yin Shan Cheng Yao* (Principles of the Correct Diet) to indicate a recognition of what became in western medicine, the beneficial effects of Vitamin B1 in the prevention of beri-beri and he concludes that the Chinese were close to the truth (Lu and Needham, 1951). Rather than adopt this approach when considering the findings of these studies I have on the whole, tended to discuss the results pragmatically in terms of congruence or divergence of recommended dietary behaviours which result from the

different conceptual systems of the Chinese respondents and the western-educated health professionals.

Jelliffe (1961) in discussing the response of nutrition educators to food taboos makes the point that it is essential to distinguish between those which serve to enhance nutritional status, those which may increase nutritional vulnerability and those which, although apparently irrational, cause no harm. Similarly, from a practical point of view, when the outcomes are congruent in behavioral terms, it is debateable whether there is any point in setting out to restructure the patients rationale. Since dietary related health beliefs are accepted as an integral part of ethnicity, any approach which tries to restructure these unnecessarily may do more harm than good in terms of undermining the sense of identify and social cohesiveness which play a crucial role in supporting an individual from an ethnic minority, trying to survive in a alien culture. (A further avoidable burden for someone who is already unwell.)

9.1 General Discussion

For many years, classical Chinese medicine, namely the "Great Tradition", has coexisted along with the "Little Tradition" of local empirical and magical-religious remedies in China and Chinese communities overseas.

The contemporaneous emergence of the "Great"/"Little" traditions have made it difficult to separate "medical" concepts exclusively into either tradition. Hence the baseline for categorisation appears unclear since a degree of conceptual overlap exists. Taking the humoral theory of medicine as an example, traditional practitioners and most "folk" use the categories of "hot" and "cold" etc. , but scholarly physicians subsume them under the concepts Yang and Yin. This clearly has implications for any attempt to identify the persistence of "traditional" ideas about diet and health Since characterisation of what constitutes an idea which has its origins in either one or the other of these traditions is not entirely clear cut. In this study, many of the elderly and diabetic interviewees seemed to be aware of the terms Yin and Yang but did not appear to use them either in their explanations of illness or dietary prescriptions. However, the dietary recommendations given by some of the diabetic patients for instance illustrated that variant forms of the same theoretical language was used. As an example, some diabetic patients mentioned the consumption of pork pancreas, ginseng, corn silk, tofu, yam and black sesame soup as being beneficial for diabetes. Although they could not articulate the reasons or rationale for doing so, it can be seen that such foods possessed a neutral

energy and a sweet flavour which in classical tradition corresponds with Yin. As diabetes, according to the "Great tradition" is considered to be a Yin condition, Yin substances boosts the deficiency in diabetes.

Despite these areas of overlap, there exists within each tradition areas of conflict where different and often antagonistic ideas have developed. Unschuld (1985) explains this phenomenon in terms of a durable pragmatic core and a "soft coating" which is adapted to different conditions in groups within various societies which means that it is flexible and subject to frequent modification. Again, taking the Hot-Cold concept to illustrate this, it can be seen that although a durable core of ideas exists i.e. there is general acceptance of the core concept of hot/cold, there is considerable variation for example in the Hot-Cold categories to which particular foods are assigned. Personal experience may play an important part in this. Although elderly respondents knew and practised the balancing of hot-cold elements via the ingestion of foods, classification of more unusual foods of which they had limited experience exhibited wide disagreement. A basic food like rice had so salient a traditional coding that few people disagreed with tradition despite individual variations. Whilst other peripheral or new foods were however, subject to individual differences in coding. Most informants seemed to follow a basic set of rules such that after experimentation, the food is coded as "hot"/"warm", "cool"/"cold" depending on the nature and severity of any symptoms which they experience. In addition to this, the colour of a food will influence its initial coding. For example, foods which are green in colour are generally classified as being "cooling" or "cold", however, if experienced as heating as would be the case with for example a chilli pepper then this valence is changed to "hot".

Against this background of concepts from the "Great"/"Little" Traditions, we see that western medicine has had an important impact on people's beliefs about food and the maintenance of health. The various specific foods mentioned by elderly respondents for treating constipation for example, illustrates the incorporation of western health practices into traditional thinking. Whilst the recommendation of fruits and vegetables for the alleviation of constipation appears to be congruent with western dietary management, respondents articulated the rationale in a different way. Since the ailment is believed to arise from an excess of "hot" energy in the body, "cooling"/"cold" foods like vegetables and fruit balances the excess heat. In fact, with only a few minor exceptions, congruity with western dietetic practice was evident throughout the respondents' recommendations for the alleviation of conditions whatever the conceptual basis.

Coming to the question of beliefs concerning the aetiology of diseases, cross-cultural comparisons between the elderly respondents' conception of the causes of conditions and those of a group of younger informants in Hong Kong (Koo, 1987) showed vast differences. Although there was a degree of consistency among beliefs concerning causation, the younger group tended to explain more diseases in terms of western concepts rather than in traditional Chinese terms. This change in health beliefs ties in well with the rapidly changing face of Hong Kong. Whilst in this the U.K., the isolated situation and the environment in which elderly Chinese live has remained static and immune to change particularly in terms of knowledge. Evidence for this were the findings that longer stay respondents were more likely to avoid certain foods for their age than their shorter stay counterparts. This tends to suggest that the longer stayers i.e. those who came to Britain earlier left Hong Kong with "older" traditional ideas than the short stayers who left Hong Kong later when traditional ideas had already begun to change.

In a still unfamiliar environment, the need for adherence to traditional beliefs remains strong. This persistence of traditional ideas has obvious implications at the interface of patient-health professionals interaction. Whilst this study has shown congruence between people's beliefs about management of conditions and western treatment, this is not to say that health professionals should remain complacent in giving dietary advice believing there to be no conflict because the underlying concepts may still be at variance.

From the dietitians and doctors studies, it was clear that their knowledge concerning traditional Chinese concepts about foods and disease was poor. The language barrier was mentioned as being the most important factor affecting effective communication with Chinese patients. But dietitians also appeared to know little about eating practices which represents a far more fundamental problem. This obstacle was compounded both by the lack of Chinese dietsheets and health education information leaflets. Contributions to an improvement in the effectiveness of health care for Chinese patients should come from health care professionals who should be encouraged to build up their knowledge of Chinese eating habits, traditional ideas about the concepts of health and disease and patterns of health problems among the Chinese community in Britain.

9.2 Areas for Future Research

Investigations with healthy community members as well as patients have provided insights into beliefs concerning the diet/health relationship. It would be interesting to obtain a more comprehensive profile of the dietary intakes of members of different age groups over a longer period of time. Repeating a series of 24 hour recalls on a number of occasions should pick up on seasonal changes in the diet. In addition, this would increase the likelihood that an illness-related dietary change might be reported. A survey amongst second generation Chinese in Britain of their beliefs about diet and health would be of interest in providing information on how their ideas have evolved.

A survey of current practices amongst hospital dietitians in Hong Kong would be of importance in investigating how ideas of western medicine have been translated into advice for Chinese patients following a largely traditional diet. As an adjunct, examining dietary advice given to ethnic Chinese patients in Chinese communities in other western countries for example, would facilitate an understanding of how western dietary advice has been adapted for their eating habits and beliefs about food and health which contain elements from both the traditional and western culture.

These inquiries would be invaluable in designing practical guidelines and improving health education at a variety of levels in the spectrum of health and diseases as well as indicating needs for professional training and supporting resources.

This study has focused on the persistence of traditional ideas, during the course of which it has become apparent that some western ideas about nutrition and health have been introduced. Following on from this, it would be desirable to undertake further in-depth work identifying the nature of those concepts which have been adopted, factors underlying their selective acceptance and the ways in which they have been incorporated into the overall conceptual framework concerning diet and health.

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LIST OF APPENDICES

CHAPTER 5

CHAPTER 8

Appendix 3.1 "Hot" foods

Food items	
Black boned chicken	Fried noodles
Chilli pepper	Onions
Chocolate	Peanuts
Dog meat	Pepper
Smoked fish	Pork meat (fatty)
Lamb	Pork lard
Lychee	Sesame seeds
Longan	Whisky
Mango	

Source: Compiled from Anderson, 1980; Koo, 1975

Appendix 3.2 "Warming" Foods

Food Items	
Abalone	Green onion
Beef meat	Pig's trotters
Beef liver	Pomegranate
Brown sugar	Pomelo skin
Chestnut	Pork meat (lean)
Chicken egg	Pork liver
Chicken soup	Pumpkin
Chicken liver	Rabbit meat
Custard apple	Sticky rice
Fennel	Sesame paste
Garlic	Rock sugar
Ginger	Sunflower seeds
Green pepper	Taro
Goose meat	Tofu cheese
Guava	Turkey
Kidney beans	Walnuts
Leeks	Watermelon seeds

Source: Compiled from Anderson, 1980; Koo, 1975

Appendix 3.3 "Neutral" Foods

Food Items	
Red beans	Peaches
Dried beancurd	Peas
String beans	Pigeon meat
Soybean oil	Pine nuts
Carrots	Plum
Cauliflower	Pomelo
Cherry	pork blood
Chicken meat	Pork brains
Chicken heart	Raisins
Dates	Rice congee
Eggs	Rice, boiled
Frogs	Soy sauce
Soup noodles	Black/red tea

Source: Compiled from Anderson, 1980; Koo, 1975

Appendix 3.4 "Cooling" Foods

Food Items	
Almonds	Lotus root
Apple	Lotus seeds
Asparagus	Millet
Bamaboo	Mushroosm
Barley	Octopus
Beef tendons	Oysters
Beer	Persimmons
Broccoli	Pineapple
Cabbage	Preserved plum
Carambola	Pork kidney
Cat meat	Pork lungs
Celery	Pork intestines
Citrus fruits	Pickled/dried radish
Coconut meat	Salt
Corn	Sea cucumber
Duck meat	Spinach
Duck blood	Squid
Eel	Strawberry
Black preserved eggs	White sugar
Salted ducks eggs	Tofu
Fish (most species)	Tomato
Grapes	Cold water
Honey	Watercress
Lettuce	Wintermelon
Yam	Watermelon

Source: Compiled from Anderson, 1980; Koo, 1975

Appendix 3.5 "Cold" foods

Food Items	
Agar agar	Dried, Chinese mushrooms
Banana	Mussels
Bean sprouts	Japanese pear
Mung beans	Shrimp
Bitter melon	Snake gallbladder
Clams	Snake meat
Coconut water	Soy bean milk
Carb	Chrysanthemum tea
Cucumber	Green tea
Kelp	Bitter tea
Loofah	Turtle meat
Dried wood ears	Univalve

Source: Compiled from Anderson, 1980; Koo, 1975

Appendix 3.6 "Supplementary" Foods

Food Items	
Abalone	Lamb heart, kidney
Beef	Lotus seeds
Beef liver, tendons, penis	Dried Mushroom
Black dates	Mullet roe
Black boned chicken	Pangolin
Kidney beans	Pigeon meat
Carp	Pork lungs, blood
carrots	Pork feet, kidney
Chicken gizzard, feet, blood	Pork liver, heart, brain
Chicken soup, eggs, heart, liver	Rabbit
Red dates	Rock sugar
Duck egg, feet	Swallow's nest
Dog meat	Sea cucumber
Duck meat	Scallops
Dong Kwi	Spinach
Eel	Black sesame
Fish lips, head, eggs	Shark's fins
Frog's legs	Snake gallbladder and meat
Jellyfish	Sparrow meat
Jujube	Swallow's nest
White fungus	Turtle
Garlic	Dried wood ears
Ginseng	Univalve
Herbs, herbal wines	
Lamb	

Source: Compiled from Anderson, 1980; Koo, 1975

Appendix 3.7 "Irritating", "Poisonous", "Wet" Foods

Food Items	
Aubergine	Ducks eggs, gizzard, meat
Asparagus	Fish sauce
Dired bamboo shoots	Lobster
Beef	Shrimp
Spice cabbage	Mango
Carp	New world squash
Crab	Pineapple
Clams	Longan
Dogmeat	Male poultry

Source: Compiled from Anderson, 1980; Koo, 1975

Appendix 4.1 The Pilot Questionnaire

0. Name:

1. Age (yrs:)

2. Sex: Male Female

3. Country of Origin: China Hong Kong
Malaysia Other (specify ----------)

4. Did you come from a Village City
Other (specify ----------)

5. Years of Residence in the U.K.

6. Occupation:

(if retired previous occupation ----------)

7. Religion: Taoist Buddhist
Christian Other

If Taoist/Buddhist

Are you a vegetarian ? Yes No

8. Marital Status: Divorced Married
Single Widowed
Other

9. Speaking dialect: Cantonese Mandarin
Hakka English
Other (specify ----------)

10. Subject's Proficiency in English

	Written	Spoken

a) Cannot understand it at all
b) Little understanding
c) Average understanding
d) Fluent in English

11. Who does the cooking at home ? Spouse Interviewee
Other (specify _____)

12. If Spouse/Other cooks

a) Do you ask him/her to include any special foods in meals with health in mind ?
Yes No

b) Do you ask him/her to prepare any special dishes with health in mind when cooking?
Yes No

13. If Interviewee cooks

a) Do you include any special foods in meals with health in mind?
Yes No

b) Do you prepare any special dishes with health in mind when cooking ?
Yes No

14. Are there any foods which you think people like yourself should avoid eating ?
Yes No

If Yes, what are they and why ?

Foods items Reasons for Avoidance

_____
_____
_____

15. Are there any foods which you discourage members of your family from eating?
Yes No

If Yes, what are they and why ? _____

Food items Reasons for Avoidance

_____
_____
_____

16. Bearing health in mind does the time of year influence your choice of food either for yourself or for your family ? Yes No

If Yes, what foods would you avoid or consume at different times of the year ?

Seasons	Food items		Reasons
	Avoided	Consumed	
Winter			
Spring			
Summer			
Autumn			

If not already mentioned about Hot-Cold concept in previous sections

17. Are you familiar with the idea that foods can be 'hot, 'cold', 'neutral', 'supplementary', 'poisonous' ? Yes No

If Yes, where or from whom did you learn these ideas ?

Parents Grandparents
Books Other (specify_____)

If already mentioned about Hot-Cold concept in previous sections

18. You seem to be familiar with the idea that foods can be 'hot', 'cold', 'neutral', 'supplementary', 'poisonous'. Where or from whom did you learn these ideas?

Parents Grandparents
Books Other (specify_____)

19. I am going to read out a list of food items to you, can you tell me which foods you think are 'hot', 'neutral', 'cold', 'supplementary' or 'poisonous'

Food Item	H	C	N	S	P	Other	Don't Know
Beef							
Chicken soup with herbs							
Tofu							
Banana							
Rice congee							
Hamburgers							
Fried fishballs							
Eggplant							
Seaweed							
Eggs							
Fried rice							
Chicken meat							
Ginseng tea							
Noodles in soup							
Boy choy							
Whiskey							
Shark's fin							
Boiled water							
Chips							
Octopus							
Cheese							
Baked beans							

H = Hot C = Cold N = Neutral S = Supplementary P = Poisonous

20. I am going to read a list of food items to tou. Can you tell me which foods you think have a salty, pungent, sweet, sour or bitter taste ?

Food items	Salty	Pungent	Sweet	Sour	Bitter	Other	Don't know
Beef							
Aduki bean							
Abalone							
Coriander							
Lettuce							
Tofu							
Kumquat							
Oyster							
Spring onion							
Asparagus							

21. According to traditional philosophy, man receives 5 flavours as food from the earth - salty, pungent, bitter, sweet and sour. Can you explain what effects these five flavours have on the body

Flavours	Effects on the body
Salty	
Pungent	
Sweet	
Sour	
Bitter	

If not already mentioned about Hot-Cold conditions in previous sections

22. Are you familiar with the idea that conditions and symptoms may be due to the body being overheated, cooled too much, exposed to too much 'wetness' or may result from a build-up of poisons or blockage of energy ?

Yes No

If Yes, where or from whom did you learn these ideas ?

Parents Grandparents
Books Other (specify)

If already mentioned about Hot-Cold conditions in previous sections

23. You seem to be familiar with the idea that conditions and symptoms may be due to body being overheated, cooled too much, exposed to too much 'wetness' or may result from a build-up of poisons or blockage of energy. Where or from whom did you learn these ideas ?

Parents Grandparents
Books Other (specify)

24. I am going to read a list of conditions to you. can you tell me which conditions are due to an excess of 'hot', 'cold', 'wet', poison, or insufficient energy in the body ?

Conditions	Xs H	Xs C	Xs W	Xs P	Insuff E	Other	Don't know
Acne/pimples							
Stroke							
Measles							
Rheumatism							
Nosebleeds							
Diarrhoea							
Diabetes							
Hypertension							
Haemorrhoids							
Gallstones							
Irregular Menstruation							
CHD							
Constipation							
Peptic ulcer							
Liver disease							
Anaemia							
Osteoarthritis							
Asthma							
Influenza							

If Spouse/Other Cooks

25. Do you think that your spouse/other thinks in terms of foods being 'hot', 'cold', 'neutral', 'supplementary', 'poisonous' when he or she prepares meals during a period when you/members of your family are ill?

Yes No Don't know

If Interviewee Cooks

26. Do you think in terms of foods being 'hot', 'cold', 'neutral', 'supplementary', 'poisonous' when you prepare meals during a period when you/members of your family are ill?

Yes No Don't know

If Yes, can you give some examples of foods which might be included or excluded if you/members of your family have one of the following conditions ?

Ailments	Foods	
	Included	Excluded
Cold		
Arthritis		
Anaemia		
Diarrhoea		
Joint pains		
Haemorrhoids		
Stomachache		
Bronchitis		
Cough		
Constipation		
Insomnia		
Hypertension		

27. If you had one of the following ailments, which would you do first ?
Would you (i) buy drugs from the chemist
(ii) go to a Chinese herbalist
(iii) go to a Western GP
(iv) include or exclude foods from diet
(v) other (specify)

Ailments	Sequence
Cold	
Arthritis	
Anaemia	
Diarrhoea	
Joint pains	
Haemorrhoids	
Stomachache	
Bronchitis	
Cough	
Constipation	
Insomnia	
Hypertension	

Diet History

1. Have you ever followed a special diet of any kind ? Yes No

   If Yes, what kind ?

2. Are you at present following a special diet of any kind ? Yes No

   If Yes, what kind ?

3. Are there any foods which you avoid because they produce unpleasant reactions ?
   Yes No

   If Yes, what are the foods ?

4. Do you have any health problems which affect the type of food you eat ?
   Yes No

   If Yes, what are the problems ?

5. Do you have any health problems which affect the amount of foods you eat ? Yes No

   If Yes, what are the problems ?

24hr Recall

1. What time did you get up yesterday ? am

2. Did you have anything to drink before breakfast yesterday ? Yes No

   If Yes, what did you have ?

3. Did you have any breakfast yesterday ? Yes No

   If Yes, what did you have ?

Where
Time
With whom

4. Did you have anything to eat/drink after breakfast and before lunch yesterday ? Yes No

   If Yes, what did you have ?

5. What did you have for lunch yesterday ?

   Where
   Time
   With whom

6. Did you have anything to eat or drink after lunch and before dinner last night ? Yes No

   If Yes, what did you have ?

7. What did you have for dinner yesterday ?

8. Did you have anything to eat or drink after dinner and before you went to bed last night ? Yes No

   If Yes, what did you have ?

9. What time did you go to bed last night ? pm

10. Do you think the foods you ate overall yesterday was well balanced ?
    Yes No

    If Yes, did you plan it or did it happen by chance
    If No, in your opinion, were the meals you ate yesterday on the whole

    'cooling' 'heating'

Appendix 4.2 The Main Questionnaire

1. Do you take much interest in food ? Yes No

2. How important do you think it is for a person of your age to be careful about what they eat?

   Essential Important Moderately important
   Not very important Not important at all

3. Are there any foods which you think people of your age should eat more of ?

   Yes No

   If Yes, what are they and why ?

   Food items Reasons

   _____

   _____

   _____

4. Are there any foods which you think people of your age should eat less of ?

   Yes No

   If Yes, what are they and why ?

   Food items Reasons

   _____

   _____

   _____

5. Bearing health in mind, does the time of year influence your choice of food ?

   Yes No

   If Yes, what would you eat more of or avoid at different times of the year and why?

Seasons	Foods		Reasons
	Avoid	Consume	
a) Winter			
b) Autumn			
c) Summer			
d) Spring			

6. According to traditional philosophy there are five energies of foods - 'hot', 'cold', 'warm', 'cool', 'neutral'. In addition, foods can also be 'supplementary', and 'poisonous'. Man also receives five flavours as food from earth, salty, sweet, sour, pungent, and bitter. Can you tell me how you would classify each of the following foods according to their different energies and flavours.
For example, some people would think that Tofu is Neutral and has a Sweet Flavour

Food items	Classification		Food items	Classification	
	Energy	Flavour		Energy	Flavour
Beef			Asparagus		
Chicken			Cabbage		
Pork			Celery		
Duck			Bitter gourd		
Lamb			Spinach		
Snake			Ginger		
Fish			Lettuce		
Shellfish			Garlic		
Chinese sausage			Spring onions		
Chicken blood			Soy sauce		
Liver			Pomelo		
Kidney			Banana		
Eggs			Orange		
Red beans			Lychee		
Black beans			Boiled rice		

Food items	Classification Energy	Flavour	Food items	Classification Energy	Flavour
Aubergine			Milk		
Butter			Ice cream		
Cheese			Bread, white		
Bread, brown			Cornflakes		
Rice Congee			Rice fried		
Yogurt			Cakes/Biscuits		
Baked beans			Hamburgers		
Fish fingers			Cottage pie		
Custard			Pomelo skin		
Chicken curry			Minestrone		
Yerk Choi soup			Ching Bo Leung soup		
Steamed fish with ginger, garlic, spring onions			Buddhist casserole		
Chicken in black bean sauce			Sweet & Sour Pork		

7a. What symptoms or abnormalities would occur if too much 'hot' foods were eaten?

Do you have any method(s) of treating these symptoms ?

What Herbal soups or teas (if any) would you drink to alleviate these symptoms ?

b. What symptoms or abnormalities would occur if too much 'cold' food were eaten ?

Do you have any method(s) of treating these symptoms ?

What Herbal soups or teas (if any) would you drink to alleviate these symptoms ?

c. What symptoms or abnormalities would occur if too much 'supplementary' foods were eaten?

Do you have any method(s) of treating these symptoms ?

What Herbal soups or teas (if any) would you drink to alleviate these symptoms ?

d. What symptoms or abnormalities would occur if too much 'poisonous ' foods were eaten ?

Do you have any method(s) of treating these symptoms ?

What Herbal soups or drinks (if any) would you drink to alleviate these symptoms ?

8. Where or from whom did you learn that foods can be 'hot', 'cold' ?

Books Own experience Grandparents

Parents Friends Other (please specify_____)

9. Can you explain what effects the five flavours of food have on the body ?

Flavours	Effects on the body
Salty	
Sweet	
Pungent	
Sour	
Bitter	

10. What energies and flavours of food do you think affect the function of the of the body ?

Organs	Energies Flavours	Organs	Energies Flavours
Heart		Lungs	
Liver		Kidneys	
Spleen		Brain	
Bones		Eye	
Intestines		Stomach	
Gallbladder			

11. I am now going to read a list of health problems to you and ask you some questions about them

a) Can you show me on this card what you think causes each of the following

b) Are there any foods which you think can help to prevent it ? Do you, in practice
eat these foods to prevent the onset of this condition?

c) Are there any foods which you think can help to treat this? Do you, in practice eat these foods to prevent this condition?

d) If you had one of the following ailments would you (i) buy drugs from the chemist (ii) go to a Chinese herbalist (iii) go to a Western GP (iv) include or exclude foods from diet (v) other (specify)

Condition	Classification	Prevention		Treatment		Sequence
		T	Pr	T	Pr	
Cold						
Influenza						
Nosebleeds						
Cough						
Constipation						
Diarrhoea						
Haemorrhoids						
Poor circulation						
Anaemia						
Tuberculosis						
Arthritis						
Gout						

Condition	Classification	Prevention		Treatment		Sequence
		T	Pr	T	Pr	
Gallstones						
Diabetes						
Hypertension						
Gastric ulcer						
Liver disease						
Renal disease						
Stroke						
CHD						

12. Do you take supplements of any kind ?

English Yes No Chinese Yes No

If Yes, what kind and why ? _____

13. Have you ever followed a special diet of any kind ?

Yes No

If Yes, what kind and why ? _____

Are you still following this diet ? Yes No

14. Are there any foods you avoid because they produce unpleasant reactions ?

Yes No

If Yes, what are the foods ? _____

_____

15. Do you have or suffer from any health problems which affect the amount or type of food you eat ?

Yes No

If Yes, what are the problems ? _____

_____

16. Do you adjust your diet to your constitution, personality and activity level ?

Yes No

If Yes, which of the following categories do you think you fall into ?

Active, thin Active, fat Inactive, thin

Inactive, fat Nervous, active Nervous, inactive

Other (please specify_____)

17. Who does the cooking at home ?

Spouse Yourself Other (please specify_____)

18. Who does most of the food shopping ?

Spouse Yourself Other (please specify____)

19. Who decides what will be eaten each day ?

Spouse Yourself Other (please specify_____)

Finally, would you mind answering a few questions about yourself please.

---

20. Age ____

21. Where were you born ?

Mainland China Hong Kong

Other (please specify_____)

22. What (if any) other countries have you lived in ?

Country	Rural Urban Arr	Dep	Age	Yrs of residence

23. How many years have you lived in the UK: _____

24. What is your occupation ? _____

25. What is your religion ?

Buddhist Christian Taoist Other

If Taoist/Buddhist Are you a vegetarian ? Yes No

26. Are you? Single Married

Widowed Other (please specify_____)

27. Can you speak ? Cantonese Mandarin

Hakka Other (please specify_____)

28. Were you educated up to

1° school 2° school

University Other (please specify_____)

29. Is your understanding of the English language

	Written	Spoken
Good		
Average		

30. Sex: Male Female

Appendix 4.3 Classification of Food Items According to Energies

Food Items	Hot/Warm	Neutral	Cool/Cold	Supplementary	Poisonous	Other	Don't know
Beef	82 (57%)	0(0%)	0(0%)	12(8%)	0(0%)	31(21%)	20(14%)
Chicken	5 (3%)	13(3%)	10(7%)	57(39%)	0(0%)	40(28%)	20(14%)
Pork	75 (52%)	4(3%)	5(3%)	0(0%)	0(0%)	31(21%)	30(21%)
Duck	0 (0%)	6(4%)	79(55%)	0(0%)	0(0%)	24(17%)	36(25%)
Lamb	42 (29%)	0(0%)	0(0%)	49(34%)	1510%)	17(12%)	22(15%)
Snake	33 (23%)	0(0%)	0(0%)	30(21%)	16(11%)	22(15%)	44(30%)
Fish	0 (0%)	43(30%)	30(21%)	0(0%)	0(0%)	49(34%)	23(16%)
Shellfish	0 (0%)	4(3%)	33(23%)	0(0%)	28(19%)	29(20%)	51(35%)
Chinese sausage	31 (21%)	0(0%)	1(1%)	4(3%)	0(0%)	51(35%)	86(59%)
Chicken blood	10 (7%)	1(1%)	0(0%)	98(68%)	0(0%)	8(6%)	28(19%)
Liver	31 (21%)	2(1%)	0(0%)	43(30%)	0(0%)	26(18%)	43(30%)
Kidney	4 (3%)	35(24%)	0(0%)	13(9%)	0(0%)	30(21%)	63(43%)
Eggs	0 (0%)	48(33%)	6(4%)	16(11%)	0(0%)	41(28%)	34(23%)
Red beans	10 (7%)	26(18%)	4(3%)	42(29%)	0(0%)	26(18%)	37(26%)
Black beans	2 (1%)	4(3%)	0(0%)	49(34%)	0(0%)	28(19%)	62(43%)
Aubergine	0(0%)	4(3%)	37(26%)	0(0%)	16(11%)	10(7%)	36(25%)
Cabbage	0(0%)	26(18%)	36(25%)	0(0%)	0(0%)	38(26%)	45(31%)
Celery	0(0%)	11(8%)	73(50%)	0(0%)	0(0%)	14(10%)	47(32%)
Gourd	0(0%)	1(1%)	100(69%)	0(0%)	0(0%)	14(10%)	30(21%)

Food Items	Hot/Warm	Neutral	Cool/Cold	Supplementary	Poisonous	Other	Don't know
Spinach	0(0%)	0(0%)	32(22%)	59(41%)	0(0%)	32(22%)	22(15%)
Spring onions	70(48%)	0(0%)	0(0%)	0(0%)	0(0%)	19(13%)	56(39%)
Lettuce	0(0%)	5(3%)	37(26%)	0(0%)	0(0%)	26(18%)	77(53%)
Ginger	77(53%)	0(0%)	0(0%)	0(0%)	0(0%)	41(28%)	27(19%)
Garlic	39(27%)	2(1%)	0(0%)	7(5%)	0(0%)	84(58%)	36(25%)
Pomelo	11(8%)	17(12%)	33(23%)	0(0%)	0(0%)	9(6%)	75(52%)
Pomelo skin	30(21%)	9(6%)	6(4%)	0(0%)	0(0%)	9(6%)	91(63%)
Banana	12(8%)	28(19%)	65(45%)	0(0%)	0(0%)	17(12%)	23(16%)
Orange	0(0%)	2(1%)	68(47%)	0(0%)	0(0%)	48(33%)	27(19%)
Lychee	40(28%)	15(10%)	0(0%)	0(0%)	0(0%)	9(6%)	81(56%)
Boiled rice	0(0%)	105(72%)	0(0%)	0(0%)	0(0%)	23(16%)	17(12%)
Soy sauce	5(3%)	31(21%)	2(1%)	0(0%)	0(0%)	0(0%)	107(74%)
Dish 1	1(1%)	17(12%)	0(0%)	0(0%)	0(0%)	44(30%)	83(57%)
Dish 2	22(15%)	0(0%)	0(0%)	0(0%)	0(0%)	0(0%)	123(85%)
Dish 3	11(8%)	2(1%)	0(0%)	0(0%)	0(0%)	7(5%)	125(85%)
Dish 4	0(0%)	15(10%)	16(11%)	0(0%)	0(0%)	17(12%)	97(67%)
Rice congee	0(0%)	73(50%)	8(6%)	0(0%)	0(0%)	15(10%)	21(15%)
Fried rice	90(62%)	0(0%)	0(0%)	2(1%)	0(0%)	10(7%)	43(30%)
Alcohol	10(7%)	0(0%)	0(0%)	14(10%)	31(21%)	5(3%)	85(59%)
Ching Bo Leung Soup	0(0%)	2(1%)	50(35%)	0(0%)	0(0%)	50(35%)	43(30%)

Food Items	Hot/Warm	Neutral	Cool/Cold	Supplementary	Poisonous	Other	Don't know
Yerk Choi Soup	0(0%)	0(0%)	0(0%)	54(37%)	0(0%)	48(33%)	43(30%)
Milk	0(0%)	20(14%)	8(6%)	0(0%)	0(0%)	28(19%)	89(61%)
Butter	4(3%)	2(1%)	0(0%)	0(0%)	1(1%)	7(5%)	131(90%)
Icecream	0(0%)	1(1%)	80(55%)	0(0%)	0(0%)	11(8%)	53(37%)
Cheese	8(6%)	3(2%)	0(0%)	35(24%)	0(0%)	25(17%)	74(51%)
White bread	0(0%)	31(21%)	0(0%)	0(0%)	0(0%)	1(1%)	113(78%)
Brown bread	11(8%)	5(3%)	0(0%)	0(0%)	0(0%)	17(12%)	112(77%)
Cornflakes	7(5%)	4(3%)	0(0%)	0(0%)	0(0%)	7(5%)	127(88%)
Yogurt	0(0%)	2(1%)	7(5%)	0(0%)	1(1%)	10(7%)	125(86%)
Biscuits and cakes	5(10%)	0(0%)	0(0%)	0(0%)	0(0%)	26(18%)	104(72%)
Baked beans	4(3%)	5(3%)	0(0%)	22(15%)	7(5%)	30(21%)	77(55%)
Hamburgers	43(30%)	2(1%)	0(0%)	3(2%)	10(7%)	5(3%)	82(57%)
Fishfingers	42(29%)	1(1%)	0(0%)	0(0%)	0(0%)	8(6%)	94(65%)
Chicken curry	74(51%)	0(0%)	0(0%)	9(6%)	0(0%)	6(4%)	56(39%)
Cottage pie	4(3%)	0(0%)	0(0%)	0(0%)	0(0%)	1(1%)	140(97%)
Custard	0(0%)	8(6%)	0(0%)	0(0%)	0(0%)	1(1%)	136(94%)
Rice pudding	0(0%)	9(6%)	7(5%)	0(0%)	0(0%)	0(0%)	129(89%)
Minestrone soup	4(3%)	0(0%)	11(8%)	0(0%)	0(0%)	21(15%)	109(75%)

Dish 1 = Steamed fish with ginger and spring onions
Dish 2 = Sweet and sour pork
Dish 3 = Chicken in black bean sauce
Dish 4 = Buddhist Casserole (Vegetarian)

Appendix 4.4 Classification of Foods

Depends on Cooking Procedure

Food Items	No	% (N=145)
Chicken	23	16
Duck	21	15
Beef	20	14
Pork	20	14
Fish	9	6

Depends on Season Eaten

Food Items	No	% (N=145)
Lamb	13	9
Snake	13	9

"Hot" and "Wet"

Food Items	No	% (N=145)
Shellfish	29	20
Cabbage	22	15
Fish	4	3

"Wet"

Food Items	No	% (N=145)
Aubergine	42	29

Fatty/Too much Cholesterol

Food Items	No	% (N=145)
Chinese sausage	16	11
Eggs	7	5

Appendix 4.4 continued

Fattening

Food Items	No	% (N=145)
Cheese	2	1
Baked beans	1	1

Not Nutritious

Food Items	No	% (N=145)
Cakes/Biscuits	26	18
Ice cream	11	8
Cheese	8	6
Hamburger	8	6
Fried rice	7	5
Chicken curry	2	1
Brown bread	1	1
Cornflakes	1	1

Essential

Food Items	No	% (N=145)
Boiled rice	15	10

Cleanses Gastrointestinal Tract

Food Items	No	% (N=145)
Ching Bo Leung	16	11
Rice congee	15	10

Appendix 4.4 continued

Produces Sputum

Food Items	No	% (N=145)
Milk	5	3
Banana	4	3

Dispels Wind

Food Items	No	% (N=145)
Ginger	10	7

Kills off Germs

Food Items	No	% (N=145)
Garlic	21	15

Nourishing

Food Items	No	% (N=145)
Yerk choi soup	33	23
Ching bo Leung	20	14

Helps digestion

Food Items	No	% (N=145)
Banana	5	3

Stimulating

Food Items	No	% (N=145)
Spring onions	7	5

Appendix 4.4 continued

Nutritious

Food Items	No	% (N=145)
Orange	48	33
Dish 1	43	30
Garlic	40	28
Fish	36	25
Eggs	34	24
Spinach	32	22
Kidney	30	21
Baked beans	29	20
Black beans	28	19
Lettuce	26	18
Liver	26	18
Red beans	26	18
Milk	23	16
Minestrone soup	21	15
Chicken	17	12
Dish 4	17	12
Brown bread	16	11
Cabbage	16	11
Cheese	15	10
Yerk choi soup	15	10
Bitter gourd	14	10
Celery	14	10
Ching bo leung	14	10
Beef	11	8
Pork	11	8
Aubergine	10	7
Ginger	10	7
Yogurt	10	7

Food Items	No	% (N=145)
Lychee	9	6
Pomelo	9	6
Pomelo skin	9	6
Snake	9	6
Banana	8	6
Boiled rice	8	6
Chicken blood	8	6
Butter	7	5
Chinese sausage	7	5
Dish 3	7	5
Cornflakes	6	4
Alcohol	5	3
Chicken curry	4	2
Lamb	4	2
Duck	3	2
Fried rice	3	2
Hamburger	2	1
Cottage pie	1	1
Custard	1	1
White bread	1	1

Dish 1 = Steamed fish with ginger and spring onions

Dish 2 = Sweet and sour pork

Dish 3 = Chicken in black bean sauce

Dish 4 = Buddhist Casserole (vegetarian)

Appendix 4.5 Agreement with Folk Classifications

Food Items	Agree	Disagree	Don't know
Boiled rice	72% (105)	16% (23)	12% (17)
Bitter gourd	69% (100)	10% (14)	21% (30)
Chicken blood	68% (98)	13% (19)	19% (28)
Spinach	63% (91)	22% (32)	15% (22)
Fried rice	62% (90)	8% (12)	30% (43)
Beef	57% (82)	29% (43)	14% (20)
Aubergine	55% (79)	20% (30)	25% (36)
Duck	55% (79)	20% (30)	25% (36)
Ginger	53% (77)	28% (41)	19% (27)
Pork	52% (75)	27% (40)	21% (30)
Liver	51% (74)	19% (28)	30% (43)
Celery	50% (73)	18% (25)	32% (47)
Rice congee	50% (73)	35% (51)	15% (21)
Spring onions	48% (70)	13% (19)	39% (56)
Orange	47% (68)	34% (50)	19% (27)
Banana	45% (65)	39% (57)	16% (23)
Eggs	44% (64)	33% (47)	23% (34)
Black beans	34% (49)	23% (34)	43% (62)
Garlic	32% (46)	43% (63)	25% (36)
Lamb	29% (42)	56% (81)	15% (22)
Alcohol	28% (41)	13% (19)	59% (85)
Lychee	28% (41)	16% (23)	56% (81)
Lettuce	26% (38)	21% (30)	53% (77)
Cabbage	25% (36)	44% (64)	31% (45)
Fish	21% (30)	63% (91)	16% (23)
Pomelo skin	21% (30)	16% (23)	63% (91)
Snake	21% (30)	49% (16)	30% (44)
Soy sauce	21% (30)	5% (7)	74% (107)
Chinese sausage	21% (30)	20% (29)	59% (86)
Shellfish	19% (27)	46% (67)	35% (51)
Red beans	18% (26)	56% (81)	26% (38)
Pomelo	12% (17)	36% (52)	52% (75)
Chicken	9% (13)	77% (112)	21% (30)
Kidney	9% (13)	48% (70)	43% (62)

Appendix 4.6 Treatment of "Hot" Symptoms

Foods Items	Number	% (N=36)*
Avoid		
'Hot' foods	5	14
Fried foods	5	14
Coriander	3	8
Cocoa	2	6
Spicy foods	2	6
Alcohol	1	3
Consume		
'Cooling' herbal tea	13	36
Fruits	12	33
Vegetables	9	25
Mung bean soup	5	14
Five flower tea	4	11
Sweet soup	4	11
Watercress soup	4	11
Vegetable soup	3	8
Chinese tea	2	6
Tofu	2	6
Chrysanthemum tea	1	3
Soya milk	1	3
Total	78	
* Column adds up to >100% because respondents could give more than one answer		

Appendix 4.7 Treatment of "Cold" Symptoms

Food Items	Number	% (N=23)
Avoid		
Raw vegetables	6	26
'Cold' foods	3	13
Consume		
Ginger tea	9	39
Ginseng tea	7	30
Dong Kwi	4	18
Moderate amount of Stimulants	4	18
Lychee tea	4	18
Ginger	4	18
Alcohol	2	12
Garlic	2	12
Coconut milk	1	4
Salt water	1	4
Total		
*Column adds up to >100% because respondents could give more than one answer		

Appendix 4.8 Classification of Food Items According to Flavours

Food Items	Sweet	Sour	Salty	Pungent	Bitter	Don't Know
Beef	10(7%)	1(1%)	3 (2%)	1(1%)	---	130(90%)
Chicken	1(1%)	---	---	---	---	144(99%)
Pork	2(1%)	---	---	---	---	143(99%)
Duck	0(0%)	---	2(1%)	---	---	143(99%)
Lamb	---	---	---	---	---	145(100%)
Snake	---	---	---	---	---	145(100%)
Fish	---	---	6(4%)	---	---	139(96%)
Shellfish	---	---	8(6%)	---	---	137(94%)
Chinese sausage	---	---	5(3%)	---	---	140(97%)
Chicken blood	---	---	---	---	---	145(100%)
Liver	2(1%)	---	---	---	---	143(99%)
Kidney	1(1%)	1(1%)	5(3%)	---	---	138(95%)
Eggs	---	---	---	---	---	145(100%)
Red beans	6(4%)	---	---	---	---	139(96%)
Black beans	1(1%)	1(1%)	6(4%)	---	---	137(94%)
Aubergine	1(1%)	---	---	---	3(2%)	141(97%)
Cabbage	2(1%)	---	---	---	---	143(99%)

Food Items	Sweet	Sour	Salty	Pungent	Bitter	Don't Know
Celery	---	---	---	---	11(8%)	134(92%)
Gourd	---	---	---	---	35(24%)	110(76%)
Spinach	1(1%)	---	---	---	4(3%)	140(97%)
Spring onions	---	---	---	3(16%)	3(2%)	119(83%)
Lettuce	2(1%)	---	---	---	13(9%)	130(90%)
Ginger	---	---	---	27(19%)	---	118(81%)
Garlic	1(1%)	---	---	14(9%)	---	130(90%)
Pomelo	1(1%)	1(1%)	---	---	12(8%)	131(90%)
Pomelo skin	1(1%)	---	---	---	---	144(99%)
Banana	6(4%)	---	---	---	1(1%)	138(95%)
Orange	10(7%)	7(5%)	---	---	---	128(88%)
Lychee	9(6%)	1(1%)	---	---	---	135(93%)
Boiled rice	2(1%)	---	---	---	---	143(99%)
Soy sauce	---	---	22(15%)	---	---	123(85%)
Dish 1	---	---	---	---	---	145(100%)
Dish 2	21(14%)		---	---	---	124(86%)
Dish 3	---	---	16(11%)	---	---	129(89%)
Dish 4	2(2%)	---	---	---	---	143(98%)

Food Items	Sweet	Sour	Salty	Pungent	Bitter	Don't Know
Rice congee	---	---	---	---	---	145(100%)
Fried rice	---	---	---	---	---	145(100%)
Alcohol	---	---	---	---	---	145(100%)
Ching Bo Leung Soup	---	---	---	---	---	145(100%)
Yerk Choi Soup	---	---	---	---	4(3%)	141(97%)
Milk	1(1%)	---	---	---	---	144(99%)
Butter	---	---	5(3%)	---	---	140(97%)
Icecream	11(8%)	---	---	---	---	134(92%)
Cheese	---	---	2(1%)	---	---	143(98%)
White bread	---	---	---	---	---	145(100%)
Brown bread	---	---	2(1%)	---	---	143(98%)
Cornflakes	---	---	---	---	---	145(100%)
Yogurt	---	4(3%)	---	---	---	141(97%)
Biscuits and cakes	3(2%)	---	---	---	---	142(98%)
Baked beans	3(2%)	---	---	---	---	142(98%)
Hamburgers	1(1%)	---	---	---	---	144(99%)
Fishfingers	---	---	---	---	---	145(100%)
Chicken curry	---	---	---	3(2%)	---	142(98%)

Food Items	Sweet	Sour	Salty	Pungent	Bitter	Don't Know
Cottage pie	---	---	---	---	---	145(100%)
Custard	---	---	---	---	---	145(100%)
Rice pudding	2(1%)	---	---	---	---	143(99%)
Minestrone soup	---	---	---	---	---	145(100%)

Dish 1 = Steamed fish with ginger and spring onions
Dish 2 = Sweet and sour pork
Dish 3 = Chicken in black bean sauce
Dish 4 = Buddhist Casserole (Vegetarian)

Appendix 4.9 **Examples of Foods Consumed with Increasing Frequency with an Increase in Age**

Foods Eaten More of	Number	% (N=71)*
Vegetables	18	25
Nourishing foods	17	35
Fish	13	18
Tonic foods	12	17
Light diet	11	16
Chicken	10	14
Fruit	7	10
Easily digested foods	7	10
Chinese flowering cabbage	7	10
Ginseng	5	7
Well cooked foods	5	7
Bird's nest	4	6
Chicken with ginger + garlic	3	4
Double boiled chicken	3	4
Medicinal foods	3	4
Rice congee	3	4
Warming foods	3	4
Rice	3	4
Pig's liver	3	4
Coconut, chicken + ginger soup	2	3
White fungus	2	3
Eggs	2	3
Milk	2	3
Pork	1	3
Meat	1	3
Fish soup	1	3
Steamed fish roe	1	3
Chestnut	1	3
Fishlips	1	3
Seaweed	1	3

Foods Eaten More of	Number	% (N=71)*
Tomatoes	1	3
Sea urchin	1	3
Pig's trotters, eggs + vinegar	1	3
Fish head	1	3
Total	156	

* Column adds up to >100% because respondents could give more than one answer

Appendix 4.10 **Examples of Foods to be Consumed with Decreasing Frequency with an Increase in Age**

Foods Eaten Less Of	Number	% (N=89)*
Foods in excess	23	26
Meat	16	23
Oily foods	11	16
Overstimulating foods	9	13
Excess 'cold' foods	9	13
Pork	6	9
White turnip	6	9
Red meat	5	9
Hard undercooked foods	5	9
Beef	4	6
Fish	4	6
Fat	4	6
Lard	4	6
Salt	3	4
Fried foods	3	4
Cheese	3	4
Pig's blood	2	3
Chocolate	2	3
Chicken liver	2	3
Eggs	2	3
Coffee	2	3
Alcohol	2	3
Vegetables	1	1
Butter	1	1
Excess rice	1	1
Chicken kidney	1	1
Beansprouts	1	1
Hard to digest foods	1	1
Canned drinks	1	1
Total	134	

* Column adds up to >100% because respondents could give more than one answer

Appendix 4.11 Examples of Foods Eaten in Winter

Food Eaten in Winter	Number	% (N=65)*
Supplementary foods	15	23
Long boiled chicken	8	12
Warming soups	8	12
Vegetables	8	12
Chicken soup	8	12
Lamb	7	12
Pig's feet	6	9
Ginger	5	8
Canned foods	5	8
Rabbit	5	8
Stewed chicken	5	8
Long boiled mutton	4	6
Hot foods	3	5
Yerk choi soup	3	5
Nourishing foods	2	3
Black beans	2	3
Samll amount of greasy foods	2	3
Oranges	2	3
Meat	2	3
Oxtail soup with orange peel	2	3
Fire pot	2	3
Fruit	2	3
Stewed dishes	2	3
Curry	2	3
Carrots	1	2
Peanuts	1	2
Orange peel	1	2
Boiled water	1	2
Birds nest soup	1	2
Garlic	1	2
Stewed chicken with black fungus	1	2
Stewed chicken with chestnuts, mushrooms	1	2
Snake soup	1	2
Canned abalone	1	2
Turtle	1	2

Food Eaten in Winter	Number	% (N=65)*
Lamb and vegetable soup	1	2
Taro with belly pork	1	2
Eel	1	2
Total	127	
* Column adds up to >100% because respondents could give more than one answer		

Appendix 4.12 Examples of Foods Avoided in Winter

Food Items	Number	% (N=24)*
Raw vegetables	11	46
'Cold' foods	6	13
Fruit	3	13
Ice cream	3	13
Meat	3	13
Jasmine tea	2	8
Total	28	
* Column adds up to >100% because respondents could give more than one answer		

Appendix 4.13 Examples of Foods Avoided in Summer

Food Items	Number	% (N=18)*
Fried foods	6	33
Dry foods	5	28
Greasy foods	4	22
Meat	4	22
Durians	2	11
'Hot' foods	1	6
Excess foods	1	6
Total	23	
* Column adds up to >100% because respondents could give more than one answer		

Appendix 4.14 Examples of Foods Eaten in Summer

Foods Eaten in Summer	Number	% (N=61)*
Cooling summer vegetables	18	25
Fruits	12	20
Clear vegetable soup	7	12
Non greasy foods	7	12
Leaf mustard soup	6	10
Watercress soup	5	8
Mustard greens	5	8
Chinese vine leaves and pork soup	5	8
Plain foods	3	5
Cool foods	3	5
Waterchestnuts	3	5
Beancurd	3	5
Dried white cabbage and pork soup	3	5
Beancurd and spinach soup	3	5
Ong choi	3	5
Pearl barley tea with rock sugar	2	5
Chrysanthemum tea	2	5
White cabbage and shitake mushroom soup	2	5
Red in snow with cellophane noodle soup	2	5
Mangetout	2	5
Wintermelon with salted egg and pork soup	2	5
Grass jelly	2	5
Kale	2	5
Ching Bo Leung soup	1	2
Chinese chives	1	2
Sugarcane juice	1	2
Cabbage	1	2
Red bean soup	1	2
Sweet soup	1	2
Coriander and fish soup	1	2
Srambled eggs and Chinese chives	1	2
Coconut juice	1	2
Sago pudding	1	2

Foods Eaten in Summer	Number	% (N=61)*
Sweet potato soup	1	2
Black tea	1	2
Watermelon	1	2
Total	115	

*Column adds up to >100% because respondents could give more than one answer

Appendix 5.1 Beliefs about Causation and Dietary Prescriptions for Haemorrhoids

Causation	No	%	Amelioration	No	% (N=39)*	Restriction	No	% (N=31)*
1. Excess hot	43	30	1. Figs	9	23	1. Hot foods	15	48
2. Excess poison	17	12	2. Bananas	8	21	2. Poisonous foods	12	39
3. Don't eat properly	13	9	3. Vegetables	7	18	3. Spicy foods	7	23
4. Excess bo	6	4	4. Wax gourd	7	18	4. Beef soup	3	23
5. Excess spices	5	3	5. Haemorrhoid pills	6	15	5. Bo foods	2	7
6. Sitting on steps	3	2	6. Cooling foods	6	15	Total	39	
7. Too much coffee	1	1	7. Carambola	5	13			
Don't know	57	39	8. Meat	4	15			
			9. Fruit	3	10			
			10. Red dates	2	5			
			11. Black fungus soup	2	5			
			12. Persimmon	2	5			
			13. Clams	2	5			
			14. Plain foods	2	5			
			15. Spinach	1	3			
			16. Eels	1	3			
			17. Taro	1	3			
			18. Celery	1	3			
			19. Black fungus	1	3			
			20. Rice	1	3			
			Total	71				

* Columns add up to >100% because respondents could give more than one answer

Appendix 5.2 Beliefs about the Causation of Constipation and Dietary Prescriptions

Causation	No	%	Amelioration	No	% (N=83)*	Restriction	No	% (N=12)*
1. Excess hot	47	32	1. Vegetables	29	35	1. Hot foods	5	42
2. Not enough fruit	16	11	2. Fruits	13	16	2. Stimulating foods	4	33
3. Not enough vegetables	16	11	3. Water	12	15	3. Spicy foods	2	17
4. Excess wet	9	6	4. Banana	9	11	4. Pungent foods	2	17
5. Insufficient energy	8	6	5. Figs	9	11	5. Wet foods	2	17
6. Sitting too long	7	5	6. Oranges	8	10	6. Snacks	1	8
7. Don't eat properly	6	4	7. Rhubarb	7	8	Total	16	
8. Don't drink enough water	3	2	8. Herbal tea	7	8			
Don't know	33	23	9. Apricots	5	6			
			10.Castor bean	5	6			
			11.White fungus	5	6			
			12.Easily digested foods	5	6			
			13.Milk	4	5			
			14.Sunflower	4	5			
			15.Tonic wine	4	5			
			16.Sugarcane	3	4			
			17.Pork	2	2			
			18.Black sesame soup	2	2			
			19.Walnut	2	2			

Causation	No	%	Amelioration	No	% (N=83)*	Restriction	No	% (N=12)*
			20.Sesame soup	2	2			
			21.Orange juice	2	2			
			22.Meat	2	2			
			23.Watercress soup	2	2			
			24.Papaya	2	2			
			25.Coconut	2	2			
			26.Chinese cabbage	2	2			
			27.Tomato	2	2			
			28.Salt water	2	2			
			29.Carrots	1	2			
			30.Chives	1	2			
			31.Slimmers tea	1	2			
			32.Fibre cereals	1	2			
			33.Plain foods	1	2			
			34.Persimmon	1	2			
			Total	159				
* Columns add up to >100% because respondents could give more than one answer								

Appendix 5.3 Beliefs about Causation and Dietary Prescriptions for Gastric Ulcer

Causation	No	%	Amelioration	No	% (N=17)*	Restriction	No	% (N=16)*
1. Irregular meals	26	18	1. Easy to digest foods	4	24	1. Sour foods	9	56
2. Eat too fast	23	16	2. Soft rice	4	24	2. Sweet foods	7	44
3. Excess hard foods	11	8	3. Tofu	4	24	3. Pungent foods	7	44
4. Excess sour/ sweet/pungent foods	10	7	4. Plain foods	4	24	4. Spicy foods	6	38
5. Eat wrong foods	7	5	5. Rice congee	3	18	5. Hard rice	3	19
6. Excess poison	5	3	6. Noodles	3	18	6. Cold foods	2	13
7. Excess sour foods	4	3	7. Milk	2	12	7. Hard foods	1	6
8. Excess pungent foods	3	2	8. Soy bean oil	1	6	8. Coffee	1	6
9. Excess stress	2	1	9. Cuttlefish	1	6	9. Crab	1	6
10.Chewing insufficiently	2	1	10.Oysters	1	6	Total	37	
11.Excess sweet foods	1	1	Total	25				
Don't know	51	35						
* Columns add up to more than >100% because each respondent could give more than one answer								

Appendix 5.4 Beliefs about Causation and Dietary Prescriptions for Diarrhoea

Causation	No	%	Amelioration	No	% (N=81)*	Restriction	No	% (N=17)*
1. Excess cold	39	27	1. Rice congee	22	27	1. Cold foods	10	59
2. Eat wrong food	29	20	2. Plain foods	19	24	2. Coconut	6	35
3. Excess cold and wet	26	18	3. Bo chai pills	16	20	3. Hot foods	4	24
4. Excess poison	11	8	4. Congee water	7	9	4. Wet foods	3	18
5. Excess hot and cold	11	8	5. Milk	7	9	5. Fatty meat	2	12
6. Poor hygiene	3	2	6. Clear soup	6	7	6. Meat	1	6
7. Unclean utensils	1	1	7. Glutinous rice	6	7	Total	26	
Don't know	24	17	8. Rice noodles in soup	5	6			
			9. Pineapple	4	5			
			10.Noodles in soup	4	5			
			11.Sour foods	3	4			
			12.Kaolin morphine	3	4			
			13.Dried ginger	2	3			
			14.Sour plum tea	2	3			
			15.Guava tea	2	3			
			16.Yam	2	3			
			17.Barley tea	2	3			
			18.Carrot	2	3			
			19.Bread	2	3			

Causation	No	%	Amelioration	No	% (N=81)*	Restriction	No	% (N=17)*
			20. Persimmon	1	1			
			21.Lotus flower	1	1			
			22.Leeks	1	1			
			23.Pomegranate	1	1			
			24. Cinnamon	1	1			
			Total	121				
* Columns add up to >100% because respondents could give more than one answer								

Appendix 5.5 Beliefs about Causation and Dietary Prescriptions for Anaemia

Causation	No	%	Amelioration	No	% (N=86)*	Restriction	No	% (N=6)*
1. Insufficient energy	34	23	1. Meat	26	30	1. Cool foods	2	33
2. Not enough meat	20	14	2. Red date	22	26	2. Coffee	2	33
3. Don't eat properly	15	10	3. Supplementary foods	20	23	3. Tea	2	33
4. Excess cold	13	9	4. Tang kuei	17	20	4. Stimulating foods	2	233
5. Body can't make enough blood	9	6	5. Pig liver soup	12	14	5. Snacks	1	17
Don't know	54	37	6. Green vegetables	11	14	Total	9	
			7. Pig liver + spinach soup	9	11			
			8. Chicken blood	9	11			
			9. Black beans	6	7			
			10.Dried fruit	6	7			
			11.Beef soup	6	7			
			12.Tonic wine	5	6			
			13.Red beans	4	5			
			14.Cuttlefish	4	5			
			15.Lamb + Dong kwi soup	4	5			
			16.Shitake mushrooms	3	4			
			17.Spinach	3	4			
			18.Offal	3	4			

Causation	No	%	Amelioration	No	% (N=86)*	Restriction	No	% (N=6)*
			19.Hot foods	3	4			
			20.Lotus seed	2	2			
			21.Snake blood	2	2			
			22.Water	2	2			
			23.Black bean soup	2	2			
			24.Dried apricots	2	2			
			25.Dried oysters	2	2			
			26.White fungus soup	2	2			
			27.Sesame	1	2			
			28.Longan	1	2			
			Total	189				
* Columns add up to > 100% because respondents could give more than one answer								

Appendix 5.6 Beliefs about Causation and Dietary Prescriptions for Hypertension

Causation	No	%	Amelioration	No	% (N=32)*	Restriction	No	% (N=24)*
1. Inherited	38	26	1. Seaweed	10	31	1. Salt	17	71
2. Excess salt	34	23	2. Neutral foods	8	25	2. Fatty foods	7	29
3. Insufficient energy	8	5	3. Do jung	8	25	3. Coffee	5	21
4. Too fat	7	5	4. Banana	5	16	4. Eggs	3	13
5. High blood pressure	6	4	5. Bitter groud	5	16	5. Alcohol	3	13
6. Excess poison	5	3	6. Lotus root	4	13	6. Stimulating foods	3	13
7. Excess wet	1	1	7. Jellyfish	3	9	7. Salted duck's egg	1	4
Don't know	46	32	8. Hair seaweed + pork soup	3	9	8. Salted fish	1	4
			9. Celery	3	9	9. Shrimp paste	1	4
			10.Pig's trotters + vinegar	2	6	Total	41	
			11.Celery in vinegar	2	6			
			12.Duck	2	6			
			13.Mung bean soup	1	3			
			14.Peach tea	1	3			
			15.Persimmon	1	3			
			16.Tonic foods	1	3			

Causation	No	%	Amelioration	No	% (N=32)*	Restriction	No	% (N=24)*
			17.Watermelon	1	3			
			18.Broadbean	1	3			
			19.Green tea	1	3			
			Total	62				
* Columns add up to >100% because respondents could give more than one answer								

Appendix 5.7 Beliefs about Causation and Dietary Prescriptions for Coronary Heart Disease

Causation	No	%	Amelioration	No	% (N=11)*	Restriction	No	% (N=17)*
1. Excess excitement	30	21	1. Plain foods	5	46	1. Stimulating foods	8	47
2. Excess anger	17	12	2. Vegetables	4	36	2. Fatty foods	5	29
3. Inherited	14	10	3. Fruit	2	18	3. Excess food	4	24
4. Too fat	9	6	4. Fish	2	18	4. Coffee	2	12
5. Excess stress	5	3	5. Pig's heart	1	9	5. Chinese sausage	1	6
6. Excess poison	4	3	Total	14		6. Fried foods	1	6
7. Excess fright	3	2				7. Excess rice	1	6
8. Excess energy	2	1				8. Alcohol	1	6
9. Don't eat well	2	1				9. Smoking	1	6
Don't know	59	41				Total	24	
* Columns add up to >100% because respondents could give more than one answer								

Appendix 5.8 Beliefs about Causation and Dietary Prescriptions for Diabetes

Causation	No	%	Amelioration	No	% (N=35)*	Restriction	No	% (N=37)*
1. Inherited	38	26	1. Pork pancreas	16	46	1. Sugar	25	68
2. Excess sugar	34	23	2. Tonic foods	8	23	2. Rice	13	35
3. Insufficient energy	8	6	3. Yam	7	20	3. Sweets	6	16
4. Too fat	7	5	4. Red berry	6	17	4. Cakes & biscuits	5	14
5. High blood pressure	6	4	5. Ginseng	6	17	5. Fatty foods	4	11
6. Excess poison	5	3	6. Tofu	4	11	6. Too much foods	2	5
7. Excess wet	1	1	7. Lamb's kidney	4	11	7. Bananas	1	3
Don't know	46	32	8. Milk	3	9	Total	56	
			9. Pig liver soup	3	9			
			10.White cabbage	3	9			
			11.Raw liver	3	9			
			12.Beef	2	6			
			13.Pork	2	6			
			14.Spinach	2	6			
			15.Waterchestnut	2	6			
			16.Red dates	2	6			
			17.Pumpkins	2	6			
			18.Guava juice	1	3			
			19.Plum	1	3			

Causation	No	%	Amelioration	No	% (N=35)*	Restriction	No	% (N=37)*
			20. Crab apple	1	3			
			21.String bean	1	3			
			22.Corn	1	3			
			23.Kohrabi	1	3			
			24.Tomatoes	1	3			
			25.Celery	1	3			
			26.Bitter melon	1	3			
			27.Coconut milk	1	3			
			Total	85				
* Columns add up to >100% because respondent could give more than one answer								

Appendix 5.9 Beliefs about Causation and Dietary Prescriptions for Gout

Causation	No	%	Amelioration	No	% (N=5)*	Restriction	No	% (N=9)*
1. Excess poison	30	21	1. Rice	2	40	1. Meat	4	44
2. Drinking	4	3	2. Red bean soup	2	40	2. Wine	3	33
3. Too much offal	4	3	3. Snake soup	1	20	3. Liver	2	22
4. Insufficient energy	3	2	Total	5		4. Kidney	2	22
5. Too much energy	3	2				Total	11	
6. Excess hot	1	1						
Don't know	100	69						
* Columns add up to >100% because respondents could give more than one answer								

Appendix 5.10 Beliefs about Causation and Dietary Prescriptions for Liver Disease

Causation	No	%	Amelioration	No	% (N=2)*	Restriction	No	% (N=6)*
1. Excess poison	19	13	1. Plum	1	50	1. Alcohol	3	50
2. Excess drinking	7	5	2. Muskmelon	1	50	2. Smoking	3	50
3. Excess smoking	4	3	3. Honey	1	50	Total	6	
4. Insufficient energy	2	1	4. Pig liver soup	1	50			
5. Excess hot	1	1	5. Japanese pear	1	50			
6. Eat wrong foods	1	1	Total	5				
Don't know	111	77						
* Columns add up to >100% because respondents could give more than one answer								

Appendix 5.11 Beliefs about Causation and Dietary Prescriptions for Gallstones

Causation	No	%	Restriction	No	% (N=6)*
1. Excess poison	40	28	1. Meat	5	83
2. Inherited	5	3	2. Fatty foods	2	33
3. Excess fatty foods	4	3	Total	7	
4. Eating excess meat	4	3			
5. Insufficient energy	3	2			
Don't know	89	61			
* Column add up to >100% because respondents could give more than one answer					

Appendix 5.12 Beliefs about Causation and Dietary Prescrptions for Renal Disease

Causation	No	%	Amelioration	No	% (N=8)*
1. Excess poison	19	13	1. Kidneys	4	50
2. Insufficient energy	2	1	2. Dates	3	38
3. Excess hot	1	1	3. Sweet potato	1	13
Don't know	123	85	4. Watermelon	1	13
			5. Black sesame soup	1	13
			Total	5	
* Column adds up to >100% because respondents could give more than one answer					

Appendix 5.13 Beliefs about Causation and Dietary Prescriptions for Nosebleed

Causation	No	%	Amelioration	No	% (N=7)*	Restriction	No	% (N=32)*
1. Excess hot	109	75	1. Radish	3	30	1. Fried foods	24	75
2. Blow nose too often	9	6	2. Chive juice	2	20	2. Deep fried foods	7	78
3. Something wrong with nose	7	5	3. Kolhrabi	2	20	3. Supplementary foods	4	44
4. Excess bo	2	1	4. Spinach	1	10	4. Black pepper	2	22
5. Excess poison	1	1	5. Chestnut	1	10	5. Curry	2	22
Don't know	17	12	6. Vinegar	1	10	6. Cocoa	1	11
			Total	10		7. Alcohol	1	11
						Total	41	
* Columns add up to >100% because respondents could give more than one answer								

Appendix 5.14 Beliefs about Causation and Dietary Prescriptions for Cold

Causation	No	%	Amelioration	No	% (N=89)*	Restriction	No	% (N=19)*
1. Excess cold	60	41	1. Oranges	21	24	1. Oily foods	10	53
2. Contagious	19	13	2. Panadol	13	15	2. Cold foods	8	42
3. Weather change	19	13	3. Cold medicine	13	15	3. Meat	2	11
4. Caught a cold wind	18	12	4. Clear foods	13	15	4. Eggs	1	5
5. Hot-cold extreme	11	8	5. Salt tea	11	12	5. Chicken	1	5
6. Got wet	9	6	6. Hot drinks	10	11	Total	22	
7. Weak body	3	2	7. Vitamins	10	11			
8. Virus	2	1	8. Tiger balm	10	11			
Don't know	4	3	9. Lemon tea	6	7			
			10.Bo chai pills	6	7			
			11.Milk	5	6			
			12.Chrysanthum tea	4	5			
			13.Salted eggs	3	3			
			14.Fluids	3	3			
			15.Easy to digest foods	3	3			
			16.Yinchaio pills	3	3			
			17.Ginger	2	2			
			18.Ginger wine	2	2			
			19.Hot foods	2	2			

Causation	No	%	Amelioration	No	% (N=89)*	Restriction	No	% (N=19)*
			20. Sweet sour plums	2	2			
			21.Toast	1	1			
			22.Milk, egg, sugar	1	1			
			23.Brandy	1	1			
			Total	145				
* Column adds up to >100% because respondents could give more than one answer								

Appendix 5.15 Beliefs about Causation and Dietary Prescriptions for Cough

Causation	No	%	Amelioration	No	% (N=71)*	Restriction	No	% (N=45)*
1. Result of flu/cold	29	20	1. Cough medicine	47	66	1. Hot/cold foods	17	38
2. Excess hot and cold	20	14	2. Hot/cold foods	18	25	2. Chocolate	12	27
3. Excess chocolate	13	9	3. Mango	5	7	3. Mucilaginous foods	12	27
4. Excess cold	12	8	4. Mustard greens	5	7	4. Oily foods	6	13
5. Excess poison	10	7	5. Lozenges	4	6	5. Banana	5	11
6. Weak chest	2	1	6. Chinese ointment	4	6	6. Milk	3	7
7. Excess wet	1	1	7. Kumquat tea	4	6	7. Milk products	3	7
Don't know	58	40	8. Watercress soup	3	4	Total	58	
			9. Duck	2	3			
			10.Wax gourd	2	3			
			11.Ginger	2	3			
			12.Ginseng	1	1			
			13.Walnut	1	1			
			Total	98				

* Columns add up to >100% because respondents could give more than one answer

Appendix 5.16 Beliefs about Causation and Dietary Prescription for Influenza

Causation	No	%	Amelioration	No	% (N=54)*	Restriction	No	% (N=8)*
1. Hot-cold extreme	47	32	1. Panadol	19	35	1. Pungent foods	5	63
2. Excess cold	31	21	2. Bo chai pills	15	28	2. Cold foods	4	50
3. Weather change	21	15	3. Hot drinks	10	19	3. Sour foods	1	13
4. Not careful about body	10	7	4. Oranges	9	17	Total	10	
5. Contagious	9	6	5. Salt tea	7	13			
6. Wear too little clothes	7	5	6. White flower oil	6	11			
7. Excess poison	6	4	7. Vitamin	5	9			
8. No resistance	5	3	8. GInger	2	4			
9. Virus	3	2	9. Brandy	2	4			
10.Weak body	3	2	Total	75				

* Columns add up to >100% because respondents could give more than one answer

Appendix 5.17 Beliefs about Causation and Dietary Prescription for Rheumatism

Causation	No	%	Amelioration	No	% (N=46)	Restriction	No	% (N=23)
1. Excess wet	52	36	1. Chinese ointment	18	39	1. Wet foods	13	57
2. Excess cold	16	11	2. Pig's trotters with vinegar+eggs	17	37	2. Cold foods	12	52
3. Excess cold and wet	14	10	3. Carp	7	15	3. Sour foods	4	17
4. Not enough lubrication in bones	12	8	4. Jobs tears porridge	4	9	4. Hot foods	1	4
5. Ageing process	11	8	5. Oil	4	9	5. Alcohol	1	4
6. Sleep too much	6	4	6. Rest	3	7	6. Oranges	1	4
7. Not doing the month properly	5	3	7. Black soybean	2	4	Total	32	
Don't know	100	69	8. Eggplant	2	4			
			9. Bitter gourd	2	4			
			10.Grape	1	2			
			11.Wine	1	2			
			12.Turtle meat	1	2			
			13.Black sesame soup	1	2			
			Total	63				
* Columns add up to >100% because respondents could give more than one answer								

Appendix 5.18 Beliefs about Causation and Dietary Prescriptions for Poor Circulation

Causation	No	%	Amelioration	No	% (N=29)*
1. Excess cold	46	32	1. Tonic wine	14	48
2. Insufficient energy	30	21	2. Pak kay	11	38
3. Excess poison	1	1	3. Kumquat	7	24
4. Not enough exercise	1	1	4. Sour foods	3	10
Don't know	67	46	5. Brown sugar	3	10
			6. Vinegar	2	7
			7. Brandy	2	7
			8. Chestnut	2	7
			9. Eel blood	1	4
			Total	45	

* Columns add up to >100% because respondents could give more than one answer

Appendix 5.19 Beliefs about Causation and Dietary Prescriptions for Tuberculosis

Causation	No	%	Amelioration	No	% (N=8)*	Restriction	No	% (N=3)*
1. Excess cold	25	17	1. Kelp	2	25	1. Cold foods	1	33
2. Excess poison	9	6	2. Tonic foods	2	25	2. Drinking	1	33
3. Weak chest	7	5	3. Figs	1	13	3. Spicy foods	1	33
4. Insufficient energy	6	4	4. Taro	1	13	Total	3	
5. Drinking	4	3	5. Oysters	1	13			
6. Smoking	3	2	6. Seagrass	1	13			
7. Infection	3	2	7. Muskmelon	1	13			
Don't know	88	61	Total	9				
* Columns add up to >100% because respondents could give more than one answer								

Appendix 5.20 Beliefs about Causation and Dietary Prescriptions for Stroke

Causation	No	%	Restriction	No	% (N=2)*
1. Excess wind	38	26	1. Salt	2	100
2. Insufficient energy	19	13	2. Bo foods	2	100
3. Excess bo	13	9	Total	4	
4. Excess salt	5	3			
5. Excess excitement	4	3			
6. Burst blood vessel	3	2			
7. Excess poison	2	1			
8. Excess bread	1	1			
Don't know	60	41			
* Column adds up to >100% because respondents could give more than one answer					

Appendix 5.21 Choice of Treatment and Beliefs About Aetiology

Health Problem	Concepts	1st Choice of Treatment
Nosebleed	Chinese	Nothing
Influenza	Chinese	Self medicate
Cold	Chinese	Self medicate
Diarrhoea	Chinese	Diet
Arthritis	Chinese	GP
Gastric ulcer	Chinese	GP
Heamorrhoids	Chinese	Self medicate
Poor circulation	Chinese	GP
CHD	Chinese	GP
Constipation	Chinese	Diet
Anaemia	Chinese	GP
Cough	Chinese	Self medicate
Stroke	Don't know	GP
Gallstones	Don't know	GP
Hypertension	Western/Don't know	GP
Tuberculosis	Don't know	GP
Gout	Don't know	GP
Liver disease	Don't know	GP
Renal disease	Don't know	GP
Diabetes	Western	GP

Appendix 6.1 The Questionnaire

1. What made you first suspect that you had diabetes ?

   _____

   _____

2. What did you do about it ? Did you ?

   Ask friends for advice

   Ask relatives for advice

   See GP

   Used foods to treat it

   Used herbal remedies to treat it

   See traditional practitioner

   Visit acupuncturist

   Other
   (specify _____)

   If food or herbal remedies were used which ones were they ?

   _____

   _____

3. What do you think was the cause of your diabetes ?

   _____

4. Thinking back, do you think the foods you were eating at

   the time had anything to do with you getting diabetes ?

   Yes No

Are there any foods which you think you could have eaten

to prevent the onset of your diabetes ? Yes No

If Yes, what are they and why ? _____

Are there any foods which you think you could have avoided

to prevent the onset of your diabetes ? Yes No

If Yes, what are they and why ? _____

5. Do you know much about traditional Chinese medicine ?

Yes No

If No, go to Q6

Have you heard that in Chinese medicine, there are three

types of diabetes ?

a) Upper diabetes associated with Lung fire

b) Middle diabetes associated with Stomach fire

c) Lower diabetes associated with Kidney fire

Yes No

If Yes, would you consider your diabetes to be one of the

above types ? Yes No

If Yes, which type ? ___

If No, what type of diabetes do you consider yours to be ?

_____

6. Are there any foods which you think would help your

diabetes ? Yes No

If Yes, what are they and why ? _____

Do you try to eat any of these foods more frequently now that you have diabetes ? Yes No

7. Have you heard that Pills of the eight ingredients (cuishi ba wei wan) can be used to treat diabetes ? Yes No

If No, go to Q8

Have you ever tried it ? Yes No

Are you using it now ? Yes No

Do these help ? Yes No

In what why ? _____

8. Do you know of any other herbal or traditional remedies used to treat diabetes ? Yes No

If No, go to Q9

Have you ever tried them ? Yes No

If Yes, which ones ? _____

Are you using any now ? Yes No

If Yes, which ones ? _____

Do these formulas help ? Yes No

In what why ? _____

9. Have you seen a dietitian at this clinic ? Yes No

If No, go to Q18
How many times have you seen her ? _____

10. What advice did the dietitian give you about foods you should eat and why ?

_____

11. What advice did the dietitian give you about foods you should avoid and why ?

_____

_____

12. Was the advice given in terms of Chinese foods ?

Yes No

13. What method of advice did the dietitian use ?

Verbal advice

Interpreter

Dietsheets in English

Dietsheets in Chinese

Audiovisual aids

Other
(specify _____)

14. Did you understand the advice she gave you ?

Yes No

If Yes, does this agree with your ideas about how diabetics should eat ? Yes No

If No, did you indicate that to the dietitian ?

Yes No

In what way(s) does the advice contradict with your ideas

_____

15. Is it practical to follow the dietitian's advice ?

Yes No

If Yes, go to Q16

If No, what problems have you encountered in trying to follow her advice ?

Have you mentioned these problems to the dietitian ?

Yes No

If Yes, was the dietitian able to help at all ? Yes No

16. How important do you think it is to follow the dietitian's advice ?

Essential

Moderately important

Important

Not very important

Not important at all

17. How satisfied are you about the advice and treatment you have received so far for your diabetes ?

Very Satisfied

Moderately Satisfied

Satisfied

Disappointed

Moderately Disappointed

Very disappointed

18. Has anyone else advised you on what foods you should or should not eat ? Yes No

If No, go to Q19

If Yes, who ? _____

19. How many times have you seen them ? _____

20. What advice did they give you ? _____

_____

21. Was the advice given in terms of Chinese foods ? Yes
No

22. What method of advice did they use ?

Verbal advice

Interpreter

Dietsheets in English

Dietsheets in Chinese

Audiovisual aids

Other
(specify _____)

23. Did you understand the advice given to you ?

Yes No

If Yes, does this agree with your ideas about how

diabetics should eat ? Yes No

If No, did you indicate that to the person ? Yes No

In what way(s) does the advice contradict with your ideas

_____

24. Is it practical to follow the advice given? Yes No

If Yes, go to Q25

If No, what problems have you encountered in trying to follow the advice ?

_____

Have you mentioned these problems to the person ?

Yes No

If Yes, was he/she able to help at all ? Yes No

25. How important do you think it is to follow this advice ?

Essential

Moderately important

Important

Not very important

Not important at all

26. How satisfied are you about the advice and treatment you have received for your condition ?

Very Satisfied

Moderately Satisfied

Satisfied

Disappointed

Moderately Disappointed

Very disappointed

27. Who would you prefer to give you advice about your diet ?

the doctor

the dietitian

a nurse

other (Specify _____)

28. Do you know any other Chinese people with diabetes ?

Yes No

If No, go to 24hr recall

If Yes, have you discussed diabetes with them ?

Yes No

If Yes, have they suggested any remedies or changes in food habits to you ? Yes No

If Yes, what were they and did you try them out ?

_____

Were your friends satisfied with the advice and treatment given to them ? Yes No

24hr Recall

1. What time did you get up yesterday ? _____am

2. Did you have anything to eat or drink before breakfast[2]?

Yes No

If Yes, what did you have ? _____

3. Did you have any breakfast yesterday ? Yes No

If Yes, what did you have ? _____

_____

What time did you have breakfast yesterday ? _____am

4. Did you have anything to eat or drink after breakfast and

   before lunch yesterday ? Yes No

   If Yes, what did you have ? _____

5. What did you have for lunch yesterday ? _____

   _____

   What time did you have lunch yesterday ? ____pm

6. Did you have anything to eat or drink after lunch and

   before dinner last night ? Yes No

   If Yes, what did you have ? _____

7. What did you have for dinner last night ? _____

   _____

   What time did you have dinner last night ? _____pm

8. Did you have anything to eat or drink after dinner and

   before going to bed last night ? Yes No

   If Yes, what did you have ? _____

9. Did you have anything to eat or drink during the night ?

   Yes No

   If Yes, what did you have ? _____

10. See separate sheet

Finally, if you do not mind answering a few questions about yourself

0. Age _____ years

1. Years of residence in UK: _____

2. Country of origin: Mainland China HK

Other

(specify _____)

3. Education: Primary school Secondary school

University

4. Understanding of spoken English: Good Average

Poor

5. Understanding of written English: Good Average

Poor

6. Occupation: _____

7. Sex: Male Female

8. When was diabetes diagnosed ? _____

9. Medication: _____

10. Times/day: _____

Other Problems: _____

10. How many times do you eat the following foods ?

Food Items	>12x/wk	8-11x/wk	4-7x/wk	1-3x/wk	1-2x/month	Rarely/Never
Brown bread						
White bread						
Brown rice						
White rice						
Noodles						
Cakes/Biscuits						
Dimsum						
Cereals						
High fibre cereals						
Red meat						
Poultry						
Fish						
Full fat milk						
Skimmed milk						
Eggs						
Butter/Margarine						
Cheese						

Food Items	> 12x/wk	8-11x/wk	4-7x/wk	1-3x/wk	1-2x/month	Rarely/Never
Pulses						
Offal						
Vegetables						
Fruit						
Dried fruit						
Dried snacks						
Soup						
Herbal soup						
Sugar						
Sweetener						
Alcohol						
Herbal medicine						

APPENDIX 6.2

LETTER TO PATIENTS

Dear

At present, there is growing concern about the health and welfare of the Chinese community in the U.K. and I am undertaking research to investigate this, with particular reference to nutrition.

The consultant at the Middlesex/University College Hospital in London gave me your name. I wonder if you would be interested in taking part in the study which I am carrying out on diabetic Chinese people? All that is required is for you to answer a few questions about your dietary habits.

If you would be willing to participate, please could you return the enclosed slip to me in the envelope provided indicating a time and place to meet suitable to you.

I do hope you will feel able to cooperate. Such little research has been carried out on the Chinese community so far but I feel that results from my study would help improve the limited facilities offered at this time to our community.

Yours sincerely,

Wynnie Yuen-Yee Chan

Appendix 6.3 **Comparision of Dietary Advice Reported to Have Been Given by Dietitians and Doctors to Avoid**

Food Items	Dietitians	Doctors
Excess sugar	+	+
Excess fat	+	-
Processed foods	+	-
Excess foods	+	+
Alcohol	+	+
Fizzy drinks	+	-
Cakes	+	-
Sweet soups	+	-
Fried foods	+	+
Excess carbohydrates	-	+
Excess rice	-	+
Fatty meat	-	+
Excess rice	-	+
Dark soy sauce	-	+

Appendix 6.4 **Comparision of Dietary Advice Reported to Have Been Given by Dietitians and Doctors to Consume**

Food Items	Dietitians	Doctors
Vegetables	+	+
Steamed dishes	+	-
Brown rice	+	-
Porridge	+	-
Brown bread	+	-
Beans	+	-
Clear soup	+	-
Fruit	-	+
Lean meat	-	+
Small frequent meals	-	+

Appendix 6.5 Frequency of Consumption of Foods

Food Items	> 12x/wk	8-11x/wk	4-7x/wk	1-3x/wk	1-2x/month	Rarely/Never
Brown bread	---	---	1 (5%)	---	---	19 (95%)
White bread	2 (10%)	1 (5%)	13 (65%)	3 (15%)	1 (5%0	---
Brown rice	---	---	---	---	---	20 (100%)
White rice	9 (45%)	8 (40%)	3 (15%)	---	---	---
Noodles	---	---	9 (45%)	9 (45%)	2 (10%)	---
Cakes/Biscuits	---	2 (10%)	12 (60%)	3 (15%)	1 (5%)	3 (15%)
Dimsum	---	---	---	4 (20%)	16 (80%)	---
Cereal	---	---	1 (5%)	---	2 (10%)	17 (85%)
High fibre cereals	---	---	---	---	---	20 (100%)
Red meat	---	---	8 (40%)	11 (55%)	1 (5%)	---
Poultry	---	---	8 (90%)	2 (10%)	---	---
Fish	---	---	10 (50%)	10 (50%)	---	---
Full fat milk	---	---	---	1 (5%)	---	19 (95%)
Skimmed milk	1 (5%)	---	3 (15%)	4 (20%)	5 (20%)	7 (35%)
Eggs	---	---	---	19 (95%)	1 (5%)	---
Butter/Margarine	---	---	1 (5%)	---	---	19 (95%)
Cheese	---	---	---	---	1 (5%)	19 (95%)

Food Items	>12x/wk	8-11x/wk	4-7x/wk	1-3x/wk	1-2x/month	Rarely/Never
Pulses	---	---	1 (5%)	13 (65%)	6 (30%)	---
Offal	---	---	---	---	20 (100%)	---
Vegetables	15 (75%)	2 (10%)	3 (15%)	---	---	---
Fruit	4 (20%)	3 (15%)	13 (65%)	---	---	---
Dried fruit	---	---	1 (5%)	8 (40%)	7 (35%)	5 (20%)
Dried snacks	---	---	1 (5%)	5 (20%)	7 (35%)	7 (35%)
Soup	---	---	16 (80%)	3 (15%)	1 (5%)	---
Herbal soup	---	---	---	13 (65%)	7 (35%)	---
Sugar	---	---	---	---	---	20 (100%)
Sweetener	---	---	---	5 (25%)	---	15 (75%)
Alcohol	---	---	---	---	4 (20%)	16 (80%)
Herbal medicine	---	---	---	5 (25%)	13 (65%)	

Appendix 6.6 Comparison of Food Frequency Data with the 24hr Recall Data

Food Items	Daily/ Almost Daily	1-3x/wk	1-2x/month	Rarely/Never	No of Respondents Mentioning in 24hr Recall
Brown bread	1 (5%)	---	---	19 (95%)	1 (5%)
White bread	16 (80%)	3 (15%)	1 (5%)	---	15 (75%)
Brown rice	---	---	---	20 (100%)	0 (0%)
White rice	20 (100%)	---	---	---	0 (0%)
Noodles	9 (45%)	9 (45%)	2 (10%)	---	12 (60%)
Cakes/Biscuits	14 (70%)	3 (15%)	1 (5%)	3 (15%)	15 (75%)
Dimsum	---	4 (20%)	16 (80%)	---	1 (5%)
Cereal	1 (5%)	---	3 (10%)	17 (85%)	4 (20%)
High fibre cereals	---	---	---	20 (100%)	0 (0%)
Red meat	8 (40%)	11 (55%)	1 (5%)	---	15 (75%)
Poultry	18 (90%)	2 (10%)	---	---	12 (60%)
Fish	10 (50%)	10 (50%)	---	---	11 (55%)
Full fat milk	---	1 (5%)	---	19 (95%)	0 (0%)
Skimmed milk	4 (20%)	4 (20%)	4 (20%)	7 (35%)	5 (25%)
Eggs	---	19 (95%)	1 (5%)	---	5 (25%)
Butter/Margarine	1 (5%)	---	---	19 (95%)	2 (10%)
Cheese	---	---	1 (5%)	19 (95%)	1 (5%)
Pulses	1 (5%)	13 (65%)	6 (30%)	---	1 (5%)

Food Items	Daily/ Almost Daily	1-3x/wk	1-2x/month	Rarely/Never	No of Respondents Mentioning in 24hr Recall
Offal	---	---	20 (100%)	---	3 (15%)
Vegetables	20 (100%)	---	---	---	20 (100%)
Fruit	20 (100%)	---	---	---	15 (75%)
Dried fruit	1 (5%)	8 (40%)	7 (35%)	5 (20%)	1 (5%)
Dried snacks	1 (5%)	5 (20%)	7 (35%)	7 (35%)	0 (0%)
Soup	16 (80%)	3 (15%)	1 (5%)	---	13 (65%)
Herbal soup	---	13 (65%)	7 (35%)	---	5 (25%)
Sugar	---	---	---	20 (100%)	0 (0%)
Sweetener	---	5 (25%)	---	15 (75%)	4 (20%)
Alcohol	---	---	4 (20%)	16 (80%)	0 (0%)
Herbal medicine	---	5 (25%)	13 (65%)	2 (10%)	0 (0%)

Appendix 6.7 Number of Servings of Foods per day (24hr Recall Data)

Food Items	1 Serving	2 Servings	3 Servings	None
Brown bread	1 (5%)	--	--	19 (95%)
White bread	7 (35%)	8 (40%)	--	5 (25%)
Brown rice	--	--	--	20 (100%)
White rice	10 (50%)	10 (50%)	--	--
Noodles	12 (60%)	--	--	8 (40%)
Cakes/Biscuits	11 (55%)	4 (20%)	--	5 (25%)
Dimsum	1 (5%)	--	--	19 (95%)
Cereal	4 (20%)	--	--	16 (80%)
High fibre cereals	--	--	--	20 (100%)
Red meat	10 (50%)	5 (25%)	--	5 (25%)
Poultry	9 (45%)	3 (15%)	--	8 (40%)
Fish	10 (50%)	1 (5%)	--	9 (45%)
Full fat milk	--	--	--	20 (100%)
Skimmed milk	5 (25%)	--	--	15 (75%)
Eggs	5 (25%)	--	--	15 (75%)
Butter/Margarine	2 (10%)	--	--	18 (90%)
Cheese	1 (5%)	--	--	19 (95%)
Pulses	1 (5%)	--	--	19 (95%)
Offal	3 (15%)	--	--	17 (85%)
Vegetables	5 (25%)	13 (65%)	2 (10%)	--
Fruit	10 (50%)	5 (25%)	--	5 (25%)
Dried fruit	1 (5%)	--	--	19 (95%)
Dried snacks	--	--	--	20 (100%)
Soup	13 (65%)	--	--	7 (35%)
Herbal soup	5 (25%)	--	--	15 (75%)
Sugar	--	--	--	20 (100%)
Sweetener	4 (20%)	--	--	16 (80%)
Alcohol	--	--	--	20 (100%)
Herbal medicine	--	--	--	20 (100%)

Appendix 7.1 The Letter

Dear

I am writing to ask for your cooperation in some of the research work which I am undertaking concerning the diet and health of the Chinese community in Britain. Naturally, I appreciate that you are very busy, but I hope that you will be able to spare about 1/2hr to complete the enclosed questionnaire. Of course, all data will be considered confidential and handled anonymously.

As you may be aware, the Chinese community includes an increasing group of older people and as a result, it seems likely that members will come into contact with the Health Services more frequently. Consequently, it is important that Health Service Personnel should be aware of their needs and problems and should have some understanding of the extent to which these patients may still hold to the ideas of traditional Chinese medicine - a factor which may influence the extent to which they follow advice based on ideas of Western medicine. Information concerning the awareness and knowledge of Western doctors about Chinese traditional beliefs regarding diet and health and also the extent and nature of contact between doctors and members of the Chinese community is important. Such data will be invaluable in helping to improve the effectiveness of other Health Service Personnel and also enable them to improve management of their patients.

I would be grateful if you could return the completed questionnaire in the enclosed reply-paid envelope at your earliest convenience. In the meantime, should you have any further questions or queries about this piece of research, please do not hesitate to contact me on 01-937-5411 (ext 437).

Yours sincerely,

WYNNIE YUEN-YEE CHAN

Appendix 7.2 The Reminder

Dear

You may remember receiving a questionnaire a few weeks ago concerning your experiences in treating patients of Chinese ethnic origin.

As I have not received a reply, I am writing to ask for your cooperation in the research work which I am undertaking. Information concerning your experiences in dealing with Chinese patients is very important. By exposing the health needs and problems of the Chinese population in Britain, it will not only help to improve the effectiveness of other Health Service Personnel but will enable them to improve management of their Chinese patients as well.

I should be grateful if you would return the completed questionnaire at your earliest convenience. Should you have any further questions or queries about this piece of research, please do not hesitate to contact me on 01-937-5411 (ext 437).

If you have already sent a reply, please ignore the letter.

Yours sincerely,

WYNNIE YUEN-YEE CHAN

Appendix 7.3 The Pilot Questionnaire

TO BE COMPLETED BY THE CHIEF DIETITIAN

PLEASE COMPLETE THE FOLLOWING QUESTIONNAIRE AS FULLY AS POSSIBLE AND MAKE BRIEF COMMENTS AFTER ANY QUESTIONS IF YOU WISH TO DO SO.

Section 1 (1-6)

---

1. Do you ever give advice to patients of Chinese ethnic origin ?

Yes 1 No 2 (7)

If you have answered No, go to Q30.

---

2. Which age group do they most commonly fall into ?

Under 25	**1**	**56-65**	**5**	
26-35	**2**	**66-75**	**6**	
36-45	**3**	**76-85**	**7**	**(8-15)**
46-55	**4**	**Over 85**	**8**	

---

3. What percentage of your patients are of Chinese ethnic origin ?

Over 75% **25-50%**

50-75% **Under 25%** **(16)**

---

4. From which country do your Chinese patients originate ?

Mainland China **1** **United Kingdom** **4**

Hong Kong **2** **Other** **5** **(17-21)**
(please specify _____)

Malaysia **3**

5. What proportion of the Chinese patients you advise are referred by GPs ?

None 1 Between 1/2 & 3/4 4

Less than 1/4 2 More than 3/4 5 (22)

Between 1/4 & 1/2 3

---

6. Are referrals generally made by

GPs of British origin 1

GPs of Chinese ethnic origin 2 (23-24)

GPs of other origin 3

---

7. Do you ever give advice to Chinese patients aged over 50?

Yes 1 No 2 (25)

---

8. If Yes, what are the most common problems which these patients present with ?

_____

_____

_____ (26-29)

_____

---

9. Have patients tried other remedies ?

Often 1 Not usually 3

Sometimes 2 Don't know 4 (30)

---

10. If Yes, what have they most frequently tried ?

Traditional food remedies 1

Herbal remedies 2

Proprietary Western medicine 3 (31-34)

Other remedies 4
(please specify _____)

---

11. Do Chinese patients ever question the advice you give them because it is contradictory to their beliefs about diet, health and the appropriate management of their disease ?

Yes 1 **No** 2 (35)

---

12. If Yes, how do you deal with the situation ?

_____

_____

_____ (36-37)

---

13. Have you experienced any difficulties in obtaining dietary compliance from patients of Chinese ethnic origin during certain conditions ?

Yes 1 **No** 2 (38)

---

14. If Yes, what are the difficulties and during which conditions are they encountered ?

Condition **Difficulties**

_____

_____

---

15. If Yes, how are such difficulties overcome ?

_____

_____

_____ (58-60)

---

16. In cases where patients of Chinese ethnic origin are followed-up, do they comply well with the advice given ?

Yes 1 No 2 (61)

---

17. If No, are there any particular reasons why they do not do so ?

_____

_____ (62-63)

---

18. Have you encountered any other difficulties in advising patients of Chinese ethnic origin ?

Yes 1 No 2 (64)

---

19. If Yes, what are the difficulties ?

_____

_____

_____ (65-66)

---

20. Do you try to include examples of Chinese foods when giving advice ?

Yes 1 No 2 (1-6)

---

21. If Yes, can you give some examples of Chinese foods which you might advise/discourage during the following conditions ?

Conditions	Examples of Chinese Foods	
	Advise	Discourage
Diabetes mellitus		
Gallstones		
Renal problems		
Hypertension		
Liver disease		
Constipation		
Haemorrhoids		
Diverticulitis		
Coronary heart disease		
Gastric ulcers		
Peptic ulcers		
Asthma		
Overweight		

Section 2

22. What teaching methods or materials do you use when advising patients of Chinese ethnic origin ? Do you use (1-6)

Verbal instructions in English 1

Verbal instructions via a Chinese interpreter 2

Diet sheets written in English 3

Diet sheets written in Chinese 4 (7-10)

Leaflets in English 5

Leaflets in Chinese 6

Audio visual aids in English 7

Audio visual aids in Chinese 8

Other 9
(please specify _____)

23. Do you or any of your dietitian colleagues give formal lectures to members of the Chinese community in order to give general advice on nutrition and diet ?

Yes 1 No 2 (11)

24. If Yes, are the lectures given to Chinese

Elderly 1

Pregnant and lactating women 2

Doctors 3 (12-15)

Health and community workers 4

Groups attending health clinics 5
(please specify which _____)

Others 6
(please specify _____)

---

25. Do you consider that Chinese patients can, in general obtain adequate dietary advice ?

Yes 1 No 2 (16)

---

26. Are supplies of health education material in Chinese adequate ?

Yes 1 No 2 (17)

---

27. If No, what topics are lacking ?

_____

_____

_____ (18-19)

---

28. Do you consider the number of Chinese interpreters to be sufficient ?

Yes 1 No 2 (20)

---

29. What have been your experiences of using a Chinese interpreter ?

_____

_____

_____ (21-22)

Section 3

30. Whose cultural and dietary rules do you feel you know most about ?

Asians 1

Chinese 2

West Indians 3 (23-26)

Other 4
(please specify _____)

31. Are you familiar with the idea that in Chinese medicine foods are believed to have 'hot', 'warm' 'neutral' 'cool' and 'cold' qualities according to the effects they have on the body ?

Yes 1 No 2 (27)

If you have answered No, go to Q34.

32. If Yes, below is a list of food items, please indicate with a tick which foods you think are 'hot', 'warm', 'neutral', 'cool', or 'cold'

Food Item	'Hot'	'Warm'	'Neutral'	'Cool'	'Cold'	Other	Don't Know
White rice, boiled							
Rice congee							
Noodles							
Bread							
Red meat							
Chicken							
Fish							
Duck							
Seafood							
Liver							
Kidney							
Eggs							
Beancurd							
Ginger							
Green Vegetables							
Milk							
Beansprouts							
Chinese cabbage							
Spring onions							

Continued.....

Continued.....

Food Item	'Hot'	'Warm'	'Neutral'	'Cool'	'Cold'	Other	Don't Know
Potatoes							
Most fruits							
Garlic							
Chilli sauce							
Fried foods							
Boiled foods							
Boiled water							

33. Can you explain what effects 'hot' and 'cold' foods are believed to have on the body ?

(1-6)

Foods	Effects on the Body
a) 'Hot'	(7-8)
b) 'Cold'	(9-10)

34. Are you familiar with the idea that in Chinese medicine, conditions are classified as being either 'hot' or 'cold' ?

Yes 1 No 2 (11)

If you have answered No, go to Q37.

35. Below is a list of conditions, please indicate by a tick which conditions you consider as being 'hot' or 'cold' ?

Condition	'Hot'	'Cold'	Don't know	Other (specify)	
Pregnancy					(12)
Lactation					(13)
Measles					(14)
Cold					(15)
Haemorrhoids					(16)
Diarrhoea					(17)
Constipation					(18)
Arthritis					(19)
Fever					(20)
Diabetes					(21)
Liver disease					(22)
Renal problems					(23)
Obesity					(24)
Hypertension					(25)
Anaemia					(26)
Heart disease					(27)
Stomach pain					(28)
Rheumatism					(29)
Gout					(30)

36. Please indicate with a tick which foods you think should be prescribed or avoided during the following conditions ?

Conditions	Prescribed Foods 'Hot'	Prescribed Foods 'Cold'	Avoided Foods 'Hot'	Avoided Foods 'Cold'	
a) 'Hot'					(31-32)
b) 'Cold'					(33-34)

37. Would you like to know more about

	Yes	No	
a) Chinese eating habits			(35)
b) Chinese traditonal ideas about diet and health			(36)
c) Patterns of ill health among the Chinese community			(37)

Section 4

38. Are alternative menu choices provided for ethnic minority patients at your hospital ?

Yes 1 No 2 (38)

39. If Yes, do menu choices include familiar foods for patients of the following ethnic origins ?

Asians 1

Chinese 2

West Indians 3 (39-42)

Other 4
(please specify _____)

---

40. Are relatives or friends of ethnic minority patients who are not catered for on the menu, encouraged to bring familiar foods into your hospital ?

Yes 1 No 2 (43)

---

41. If Yes, are there difficulties in obtaining dietary compliance when relatives bring in foods from home ?

Yes 1 No 2 (44)

---

42. If Yes, what particular problems have arisen ?

_____

_____

_____ (45-46)

---

43. Do you think eating arrangements for patients of Chinese ethnic origin are satisfactory ?

Yes 1 No 2 (47)

---

44. If No, what areas need to be improved ?

_____

_____

_____ (48-49)

Finally, it would be be most helpful if you would provide a little information about yourself. Please tick the appropriate box.

45. Age group: Under 25 1 46-55 4

26-35 2 Over 55 5

36-45 3 (50)

46. Country of birth: _____ (51-52)

47. In which country (countries) were you educated ?

_____ (53-54)

48. Date of completion of training ? _____ (55-58)

49. Any working experience outside the United Kingdom ?

_____

_____ (59-60)

If special diet sheets or leaflets written in Chinese are used as methods of teaching I would be most grateful if a copy could be enclosed with the completed questionnaire.

THANK YOU VERY MUCH FOR YOUR HELP

Appendix 7.4 The Main Questionnaire

TO BE COMPLETED BY THE CHIEF DIETITIAN

PLEASE COMPLETE THE FOLLOWING QUESTIONNAIRE AS FULLY AS POSSIBLE AND MAKE BRIEF COMMENTS AFTER ANY QUESTIONS IF YOU WISH TO DO SO.

Section 1 (1 - 6)

---

1. Do you ever give advice to patients of Chinese ethnic origin ?

Yes 1 No 2 (7)

If you have answered No, but have a dietitian in your group who specialises in dealing with Chinese patients. Please tick this box Would you please pass this questionnaire onto her to complete. Otherwise, please go to Q30.

---

2. Which age group do they most commonly fall into ?

Under 25	1	56-65	5	
26-35	2	66-75	6	
36-45	3	76-85	7	(8-15)
46-55	4	Over 85	8	

---

3. What percentage of your patients are of Chinese ethnic origin ?

Over 75% 25-50%

(16)

50-75% Under 25%

---

4. From which country do your Chinese patients originate ?

Mainland China 1 United Kingdom 4

Hong Kong 2 Other 5 (17-21)
(please specify _____)

Malaysia 3

5. What proportion of the Chinese patients you advise are referred by GPs ?

None 1 Between 1/2 & 3/4 4

Less than 1/4 2 More than 3/4 5 (22)

Between 1/4 & 1/2 3

---

6. Are referrals generally made by

GPs of British origin 1

GPs of Chinese ethnic origin 2 (23-24)

GPs of other origin 3

---

7. Do you ever give advice to Chinese patients aged over 50 ?

Yes 1 No 2 (25)

---

8. If Yes, what are the most common problems which these patients present with ?

_____

_____

_____ (26-29)

---

9. Have patients tried other remedies ?

Often 1 Not usually 3

Sometimes 2 Don't know 4 (30)

---

10. If Yes, what have they most frequently tried ?

Traditional food remedies 1

Herbal remedies 2

Proprietary Western medicine 3 (31-34)

Other remedies 4
(please specify _____)

---

11. Do Chinese patients ever question the advice you give them because it is contradictory to their beliefs about diet, health and the appropriate management of their disease ?

Yes 1 No 2 (35)

---

12. If Yes, how do you deal with the situation ?

_____

_____

_____ (36-37)

---

13. Have you experienced any difficulties in obtaining dietary compliance from patients of Chinese ethnic origin during certain conditions ?

Yes 1 No 2 (38)

---

14. If Yes, what are the difficulties and during which conditions are they encountered ?

Condition Difficulties

_____

_____

_____

15. If Yes, how are such difficulties overcome ?

_____

_____ (58-60)

---

16. In cases where patients of Chinese ethnic origin are followed-up, do they comply well with the advice given ?

Yes 1 No 2 (61)

17. If No, are there any particular reasons why they do not do so ?

_____

_____ (62-63)

_____

18. Have you encountered any other difficulties in advising patients of Chinese ethnic origin ?

Yes 1 No 2 (64)

19. If Yes, what are the difficulties ?

_____ (65-69)

20. Do you try to include examples of Chinese foods when giving advice ?

Yes 1 No 2 (1-6)

21. If Yes, can you give some examples of Chinese foods which you might advise/discourage during the following conditions ?

Conditions	Examples of Chinese Foods	
	Advise	Discourage
Diabetes mellitis		
Gallstones		
Renal problems		
Hypertension		
Liver disease		
Constipation		
Haemorrhoids		
Diverticulitis		
Coronary heart disease		
Gastric ulcers		
Peptic ulcers		
Asthma		
Overweight		

Section 2

22. What teaching methods or materials do you use when advising patients of Chinese ethnic origin ? Do you use (1-6)

Verbal instructions in English 1

Verbal instructions via a Chinese interpreter 2

Diet sheets written in English 3

Diet sheets written in Chinese 4 (7-10)

Leaflets in English 5

Leaflets in Chinese 6

Audio visual aids in English 7

Audio visual aids in Chinese 8

Other 9
(please specify _____)

23. Do you or any of your dietitian colleagues give formal lectures to members of the Chinese community in order to give general advice on nutrition and diet ?

Yes 1 No 2 (11)

24. If Yes, are the lectures given to Chinese

Elderly 1

Pregnant and lactating women 2

Doctors 3 (12-15)

Health and community workers 4

Groups attending health clinics 5
(please specify which _____)

Others 6
(please specify _____)

---

25. Do you consider that Chinese patients can, in general obtain adequate dietary advice ?

Yes 1 No 2 (16)

---

26. Are supplies of health education material in Chinese adequate ?

Yes 1 No 2 (17)

---

27. If No, what topics are lacking ?

_____

_____ (18-19)

---

28. Do you consider the number of Chinese interpreters to be sufficient ?

Yes 1 No 2 (20)

---

29. What have been your experiences of using a Chinese interpreter ?

_____

_____ (21-22)

Section 3

30. Whose cultural and dietary rules do you feel you know most about ?

Asians 1

Chinese 2

West Indians 3 (23-26)

Other 4
(please specify _____)

31. Are you familiar with the idea that in Chinese medicine foods are believed to have 'hot', 'warm' 'neutral' 'cool' and 'cold' qualities according to the effects they have on the body ?

Yes 1 No 2 (27)

If you have answered No, go to Q34.

32. If Yes, below is a list of food items, please indicate with a tick which foods you think are 'hot', 'warm', 'neutral', 'cool', or 'cold'

Food Item	'Hot'/'Warm'	'Neutral'	'Cool'/'Cold'	Other	Don't Know
White rice, boiled					
Rice congee					
Noodles					
Bread					
Red meat					
Chicken					
Fish					
Duck					
Seafood					
Liver					
Kidney					
Eggs					
Beancurd					
Ginger					
Green Vegetables					
Milk					
Beansprouts					

Continued.....

Continued.....

Food Item	'Hot'/'Warm'	'Neutral'	'Cool'/'Cold'	Other	Don't Know
Chinese cabbage					
Spring onions					
Potatoes					
Most fruits					
Garlic					
Chilli sauce					
Fried foods					
Boiled foods					
Boiled water					

33. Can you explain what effects 'hot' and 'cold' foods are believed to have on the body ?

(1-6)

Foods	Effects on the Body
a) 'Hot'	(7-8)
b) 'Cold'	(9-10)

34. Are you familiar with the idea that in Chinese medicine, conditions are classified as being either 'hot' or 'cold' ?

Yes 1 No 2 (11)

If you have answered No, go to Q37.

35. Below is a list of conditions, please indicate by a tick which conditions you consider as being 'hot' or 'cold' ?

Condition	'Hot'	'Cold'	Don't know	Other (specify)	
Pregnancy					(12)
Lactation					(13)
Measles					(14)
Cold					(15)
Haemorrhoids					(16)
Diarrhoea					(17)
Constipation					(18)
Arthritis					(19)
Fever					(20)
Diabetes					(21)
Liver disease					(22)
Renal problems					(23)
Obesity					(24)
Hypertension					(25)
Anaemia					(26)
Heart disease					(27)
Stomach pain					(28)
Rheumatism					(29)
Gout					(30)

36. Would you like to know more about

	Yes	No	
a) Chinese eating habits			(35)
b) Chinese traditonal ideas about diet and health			(36)
c) Patterns of ill health among the Chinese community			(37)

Section 4

38. Are alternative menu choices provided for ethnic minority patients at your hospital ?

Yes 1 No 2 (38)

39. If Yes, do menu choices include familiar foods for patients of the following ethnic origins ?

Asians 1

Chinese 2

West Indians 3 (39-42)

Other 4
(please specify _____)

40. Are relatives or friends of ethnic minority patients who are not catered for on the menu, encouraged to bring familiar foods into your hospital ?

Yes 1 No 2 (43)

41. If Yes, are there difficulties in obtaining dietary compliance when relatives bring in foods from home ?

Yes 1 No 2 (44)

42. If Yes, what particular problems have arisen ?

_____

_____ (45-46)

_____

43. Do you think eating arrangements for patients of Chinese ethnic origin are satisfactory ?

Yes 1 No 2 (47)

44. If No, what areas need to be improved ?

_____

_____

_____ (48-49)

Finally, it would be be most helpful if you would provide a little information about yourself. Please tick the appropriate box.

45. Age group: Under 25 1 46-55 4

26-35 2 Over 55 5

36-45 3 (50)

46. Country of birth: _____ (51-52)

47. In which country (countries) were you educated ?

_____ (53-54)

48. Date of completion of training ? _____ (55-58)

49. Any working experience outside the United Kingdom ?

_____

_____ (59-60)

If special diet sheets or leaflets written in Chinese are used as methods of teaching I would be most grateful if a copy could be enclosed with the completed questionnaire.

THANK YOU VERY MUCH FOR YOUR HELP

Appendix 7.5 Classification of some common Chinese foods (N=14)

Food Items	Hot/Warm	Neutral	Cool/Cold	Other	Don't know
White rice boiled	2 (14%)	8 (57%)	4 (29%)	0 (0%)	0 (0%)
Rice congee	0 (0%)	4 (29%)	2 (14%)	0 (0%)	8 (57%)
Noodles	3 (21%)	4 (29%)	2 (14%)	0 (0%)	5 (36%)
Bread	1 (7%)	8 (57%)	1 (7%)	0 (0%)	4 (29%)
Red meat	12 (86%)	0 (0%)	1 (7%)	0 (0%)	1 (7%)
Chicken	4 (29%)	5 (36%)	2 (14%)	0 (0%)	3 (21%)
Fish	4 (29%)	4 (29%)	3 (21%)	0 (0%)	3 (21%)
Duck	10 (71%)	0 (0%)	0 (0%)	0 (0%)	4 (29%)
Seafood	5 (36%)	1 (7%)	3 (21%)	1 (7%)	4 (29%)
Liver	9 (64%)	1 (7%)	0 (0%)	0 (0%)	4 (29%)
Kidney	9 (64%)	1 (7%)	0 (0%)	0 (0%)	4 (29%)
Eggs	5 (36%)	4 (29%)	0 (0%)	0 (0%)	5 (36%)
Beancurd	2 (14%)	4 (29%)	4 (29%)	0 (0%)	4 (29%)
Ginger	8 (57%)	1 (7%)	4 (29%)	0 (0%)	1 (7%)
Green leafy vegetables	0 (0%)	5 (36%)	5 (36%)	0 (0%)	4 (29%)
Milk	3 (21%)	2 (14%)	4 (29%)	0 (0%)	5 (36%)
Beansprouts	2 (14%)	2 (14%)	7 (50%)	0 (0%)	3 (21%)
Chinese cabbage	3 (21%)	3 (21%)	5 (36%)	0 (0%)	3 (21%)
Spring onions	6 (43%)	1 (7%)	4 (29%)	0 (0%)	3 (21%)
Potatoes	2 (14%)	6 (43%)	3 (21%)	0 (0%)	3 (21%)
Most fruits	0 (0%)	1 (7%)	10 (71%)	0 (0%)	3 (21%)
Garlic	10 (71%)	0 (0%)	2 (14%)	0 (0%)	2 (14%)
Chilli sauce	9 (64%)	0 (0%)	1 (7%)	0 (0%)	4 (29%)
Fried foods	9 (64%)	1 (7%)	1 (7%)	0 (0%)	3 (21%)
Boiled foods	1 (7%)	4 (29%)	5 (36%)	0 (0%)	4 (29%)
Boiled water	1 (7%)	5 (36%)	3 (21%)	0 (0%)	5 (36%)

Appendix 7.6 Classification of Conditions (N=12)

Food Items	Hot	Cold	Other	Don't know
Pregnancy	10 (83%)	2 (17%)	0 (0%)	0 (0%)
Lactation	3 (25%)	7 (58%)	0 (0%)	2 (17%)
Measles	4 (33%)	2 (17%)	0 (0%)	6 (50%)
Cold	4 (33%)	3 (25%)	0 (0%)	5 (42%)
Haemorrhoids	1 (8%)	1 (8%)	0 (0%)	10 (83%)
Diarrhoea	3 (25%)	2 (17%)	0 (0%)	7 (58%)
Constipation	1 (8%)	3 (25%)	0 (0%)	8 (67%)
Arthritis	2 (17%)	2 (17%)	0 (0%)	8 (67%)
Fever	6 (50%)	0 (0%)	0 (0%)	6 (50%)
Diabetes	2 (17%)	2 (17%)	0 (0%)	8 (67%)
Liver disease	2 (17%)	0 (0%)	0 (0%)	10 (83%)
Renal problems	1 (8%)	1 (8%)	0 (0%)	10 (83%)
Obesity	1 (8%)	1 (8%)	0 (0%)	10 (83%)
Hypertension	2 (17%)	0 (0%)	0 (0%)	10 (83%)
Anaemia	0 (0%)	2 (17%)	0 (0%)	10 (83%)
CHD	2 (17%)	1 (8%)	0 (0%)	9 (75%)
Stomach pain	2 (17%)	1 (8%)	0 (0%)	9 (75%)
Rheumatism	0 (0%)	2 (17%)	0 (0%)	10 (83%)
Gout	0 (0%)	2 (17%)	0 (0%)	10 (83%)

Appendix 7.7 Examples of Foods which Dietitians Reported Advising their Chinese Patients with Asthma, Coronary Heart Disease (CHD) and Overweigt to Eat or Avoid

Asthma	Food Groups	Examples of Foods	
		English	Chinese
Avoid	Excess fat	Deep fried and fried foods	Chinese sausage, fried rice, peanut oil, spring rolls
	Miscellaneous	—	Sweet and sour foods

CHD	Food Groups	Examples of Foods	
		English	Chinese
Avoid	Excess fat	Deep fried, fried foods	Chinese sausage, fried rice, peanut oil, spring rolls
	Offal	Liver	—
	Meat	Fatty meat	—
	Seafood	Shellfish	—
Consume	High fibre	Brown flour, fruit, vegetables	Bamboo shoots, brown rice, sprouted beans, wholewheat noodles
	Meat/Fish/ Poultry	Chicken, duck, fish, lean meat	—
	Miscellaneous	—	Beancure, fat-free soups, plain noodles, plain foods, rice congee, steamed foods, white rice

Overweight	Food Groups	Examples of Foods	
		English	Chinese
Avoid	Excess sugar	Sweet sticky dishes	Cakes, sweet soups, sweet condensed milk
	Excess fat	Deep fried, fried foods	Chinese sausage, fried rice, peanut oil, spring rolls
	Miscellaneous	Large meat portions	Dumplings, ginger, milk, squash, sweet ans sour foods
Consume	High fibre	Brown flour, fruit, vegetables	Bamboo shoots, brown rice, sprouted beans, wholewheat noodles

Appendix 8.1 The Letter

Dear

I am writing to ask for your cooperation in some of the research work which I am undertaking concerning the diet and health of the Chinese community in Britain. Naturally, I appreciate that you are very busy, but I hope that you will be able to spare about 1/2hr to complete the enclosed questionnaire. Of course, all data will be considered confidential and handled anonymously.

As you may be aware, the Chinese community includes an increasing group of older people and as a result, it seems likely that members will come into contact with the Health Services more frequently. Consequently, it is important that Health Service Personnel should be aware of their needs and problems and should have some understanding of the extent to which these patients may still hold to the ideas of traditional Chinese medicine - a factor which may influence the extent to which they follow advice based on ideas of Western medicine. Information concerning the awareness and knowledge of Western doctors about Chinese traditional beliefs regarding diet and health and also the extent and nature of contact between doctors and members of the Chinese community is important. Such data will be invaluable in helping to improve the effectiveness of other Health Service Personnel and also enable them to improve management of their patients.

I would be grateful if you could return the completed questionnaire in the enclosed reply-paid envelope at your earliest convenience. In the meantime, should you have any further questions or queries about this piece of research, please do not hesitate to contact me on 01-937-5411 (ext 437).

Yours sincerely,

WYNNIE YUEN-YEE CHAN

Appendix 8.2 The Reminder

Dear

You may remember receiving a questionnaire a few weeks ago concerning your experiences in treating patients of Chinese ethnic origin.

As I have not received a reply, I am writing to ask for your cooperation in the research work which I am undertaking. Information concerning your experiences in dealing with Chinese patients is very important. By exposing the health needs and problems of the Chinese population in Britain, it will not only help to improve the effectiveness of other Health Service Personnel but will enable them to improve management of their Chinese patients as well.

I should be grateful if you would return the completed questionnaire at your earliest convenience. Should you have any further questions or queries about this piece of research, please do not hesitate to contact me on 01-937-5411 (ext 437).

If you have already sent a reply, please ignore the letter.

Yours sincerely,

WYNNIE YUEN-YEE CHAN

Appendix 8.3 The Pilot Questionnaire for Caucasian Doctors

Diet, Health and the Chinese Community in Britain

Please complete the following questionnaire as fully as possible and make brief comments after any questions if you wish to do so

---

Serial Number Location

Section 1

---

1. Do you treat any patients of Chinese ethnic origin ?

Yes No

If NO, please return the questionnaire in the reply-paid envelope

---

2. Which age group do they most commonly fall into ?

Under 25	56-65
26-35	66-75
36-45	76-85
46-55	Over 85

---

3. What percentage of your patients are of Chinese ethnic origin ?

Over 75%	25-50%
50-75%	Under 25%

---

4. From which country do your Chinese patients originate ?

Mainland China	United Kingdom
Hong Kong	Other (please specify _____)
Malaysia	

---

5. Do you ever see Chinese patients aged over 50 years ?

Yes No

If Yes, what are the problems which these patients present with ?

Section 2

6. If a Chinese patient came to you with one of the following ailments, what would be your first choice of treatment ? Would you

A) Advise them about what to eat and avoid
B) Prescribe medication
C) Advise consultation with a Chinese traditional practitioner
D) Other (please specify)

Ailments	Principal Treatment			
	A	B	C	D
Diabetes				
Hypertension				
Gallstones				
Constipation				
Haemorrhoids				
Diverticulitis				
Stomach cancer				
Anaemia				
Rheumatism				
Arthritis				
Cough				
Common cold				
Sore throat				

7. If a Chinese patient came to you with one of the following ailments, what kinds of foods (including Chinese) and drinks (if any) would you advise them to avoid or consume ?

Ailments	Examples of Chinese Foods	
	Advise	Discourage
Diabetes mellitis		
Gallstones		
Hypertension		
Constipation		
Haemorrhoids		
Diverticulitis		
Stomach cancer		
Anaemia		
Rheumatism		
Arthritis		
Cough		
Common cold		
Sore throat		

8. In what other conditions would you expect to give dietary advice ?

9. Do you ever refer Chinese patients to see a dietitian ?

Yes No

If Yes, for which conditions would you consider a referral ?

If No, why not ? _____

_____

Section 3

10. Do you think herbalists and traditional practitioners have a place in treating certain conditions ?

Yes No

If Yes, for which conditions would you advise your patients to consult either a herbalist or a traditional practitioner?

_____

_____

Section 4

11. Have your Chinese patients tried other remedies before coming to see you ?

Yes No

If Yes, what have they most frequently tried ?

Traditional food remedies

Herbal remedies

Proprietary Western medicine

Other remedies
(please specify _____)

For which conditions are patients most likely to try herbal or traditional food remedies

_____

_____

Section 5

12. Have your Chinese patients ever reported to you any problems that they have encountered during their contact with the National Health Service ?

Yes No Don't know

If Yes, what kind of problems have they encountered ?

_____

_____

---

13. Do you think that counselling and support services for Chinese patients are adequate ?

Yes No Don't know

---

14. Do you feel there is a need for more Chinese interpreters to be employed by the National Health Service ?

Yes No Don't know

---

15. Have you encountered any other difficulties in advising patients of Chinese ethnic origin ?

Yes No

If Yes, what are the difficulties ?

_____

_____

Section 6

---

16. Which of the following ethnic groups do you feel is important for the GP in your area to know most about ?

Asians

Chinese

West Indians

Other
(please specify _____)

---

17. Are you familiar with the idea that in Chinese medicine foods are believed to have 'hot', 'warm' 'neutral' 'cool' and 'cold' qualities according to the effects they have on the body ?

Yes No

If you have answered No, go to Q18.

If Yes, below is a list of food items, please indicate with a tick which foods you think are 'hot', 'warm', 'neutral', 'cool', or 'cold'

Food Item	'Hot'/'Warm'	'Neutral'	'Cool'/'Cold'	Other	Don't Know
White rice, boiled					
Rice congee					
Noodles					
Bread					
Red meat					
Chicken					
Fish					
Duck					
Seafood					
Liver					
Kidney					
Eggs					
Beancurd					
Ginger					
Green Vegetables					
Milk					
Beansprouts					
Chinese cabbage					
Spring onions					
Potatoes					

Food Item	'Hot'/'Warm'	'Neutral'	'Cool'/'Cold'	Other	Don't Know
Most fruits					
Garlic					
Chilli sauce					
Fried foods					
Boiled foods					
Boiled water					

18. Are you familiar with the idea that in Chinese medicine, conditions are classified as being associated with an excess of 'hot','cold', 'wet', 'poisonous' or insufficient energy in the body ?

Yes No

If you have answered No, go to Q19.

If Yes, below is a list of conditions, please indicate by a tick which conditions you consider as being associated with an excess of 'hot', 'cold', 'poisonous' 'wet' energy or insufficient energy in the body

Condition	Xs 'Hot'	Xs 'Cold'	Xs 'Wet'	Xs 'Poison'	Insuff energy	Don't know	Other (specify)
Pregnancy							
Lactation							
Measles							
Cold							
Haemorrhoids							
Diarrhoea							
Constipation							
Arthritis							
Fever							

Condition	'Hot'	'Cold'	'Wet'	'Poison'	Insuff energy	Dont know	Other (specify)
Diabetes	Xs	Xs	Xs	Xs	Insuff	Dont	Other
Liver disease							
Renal problems							
Obesity							
Hypertension							
Anaemia							
Heart disease							
Stomach pain							
Rheumatism							
Gout							

19. Would you like to know more about

	Yes	No
a) Chinese eating habits		
b) Chinese traditonal ideas about diet and health		
c) Patterns of ill health among the Chinese community		

Finally, it would be most helpful if you would provide a little information about yourself. Please tick the appropriate box

---

Section 7

1. Age Group:

	25-29	40-44
	30-34	45-49
	35-39	Over 50

2. Sex: Male Female

3. Place of Birth: _____

THANK YOU VERY MUCH FOR YOUR HELP

Appendix 8.4 The Pilot Questionnaire for Chinese Doctors

DIET, HEALTH AND THE CHINESE COMMUNITY IN BRITAIN

Please complete the following questionnaire as fully as possible and make brief comments after any questions if you wish to do so

---

1. Do you treat any patients of Chinese ethnic origin ?

   Yes No

2. If NO, can you please return the questionnaire in the reply-paid envelope

3. If Yes, what proportion of registered patients are of Chinese origin ?

   All
   Over 3/4
   Between 1/2 & 3/4
   Between 1/4 & 1/2
   Less than 1/4

4. From which country do most of your Chinese patients originate?

   Mainland China
   Hong Kong
   Other
   (please specify _____)
   Malaysia
   United Kingdom

5. Do you regularly see Chinese patients aged over 50yrs ?

   Yes No

6. If Yes, what are the most common problems which these patients present with ?

   _____

   _____

7. Do you find that the patients previous experience of the effectiveness of Western medicine and health care affect the way in which your advice is taken or followed ?

   Yes No Don't know

8. If Yes, in what way ?_____

_____

_____

9. Have patients tried other remedies before coming to see you?

Often Not usually

Sometimes Don't know

10. If Often/Sometimes, what have they most frequently tried ?

Traditional remedies

Proprietary western medicine

Other

(please specify _____)

11. Do patients ever question the advice you give them because it is contradictory to their traditional beliefs about diet and health ?

Yes No Don't know

12. Do you ever adapt your advice to fit in with traditional food beliefs and practices ?

Yes No Don't know

13. If a middle-aged Chinese patient came to you with one of the following ailments what would be your first choice of treatment ?

a) Advise them about what to eat or avoid during their illness
b) Prescribe medication
c) Advise consultation with a traditional practitioner
d) Other (please specify)

Ailments	Principal Treatment a	b	c	d
Common cold				
Haemorrhoids				
Cough				
Sore throat				
Diarrhoea				
Constipation				
Hypertension				
Arthritis				
Joint pains				
Stomachache				

14. If a middle-aged Chinese patient came to you with one of the following ailments, would you advise that any food or drink should be reduced in intake or avoided altogether ?

Ailments	Reduced		Avoided	
	Yes	No	Yes	No
Common cold				
Haemorrhoids				
Cough				
Sore throat				
Diarrhoea				
Constipation				
Hypertension				
Arthritis				
Joint pains				
Stomachache				

15. If Yes, to any of the above conditions, please specify which foods

Ailments	Examples of Foods	
	Reduced	*Avoided*
Common cold		
Haemorrhoids		
Cough		
Sore throat		
Diarrhoea		
Constipation		
Hypertension		
Arthritis		
Joint pains		
Stomachache		

16. In what other conditions would you expect to give dietary advice ?

_____

_____

_____

17. Do you think traditional practitioners have a place in treating certain conditions ?

Yes No Don't know

18. If Yes, would you advise your patients suffering form certain conditions to see a traditional practitioner ?

Yes No Don't know

19. If Yes, during which conditions would you advise your patients to consult a traditional practitioner ?

_____

_____

_____

20. Have your patients ever reported to you any problems or difficulties that they have encountered during their contact with the National Health Service ?

Yes No Don't know

21. If Yes, what are, or were the problems or difficulties encountered ?

_____

_____

22. Do you think counselling and support services for Chinese patients is adequate ?

Yes No Don't know

23. If No, for what type of patients is extra help needed ?

_____

_____

_____

24. Do you feel there is a need for more health education material to be translated into Chinese ?

Yes No Don't know

25. Do you feel there is a need for more Chinese interpreters to be employed by the National Health Service?

Yes No Don't know

Finally, it woul be most helpful if you would provide a little information about yourself. Please tick the appropriate box

---

1. Age Group:
   - 25-29
   - 30-34
   - 35-39
   - 40-44
   - 45-49
   - Over 50

2. Sex:
   - Male
   - Female

3. Country of Origin:
   - Mainland China
   - Hong Kong
   - Malaysia
   - United Kingdom
   - Other
   - (please specify_____)

4. Years of residence in U.K. ____

5. Your Speaking Dialect:
   - Cantonese
   - Hakka
   - English
   - Mandarin
   - Other
   - (please specify _____)

6. In which country were you educated ?
   - Mainland China
   - Malaysia
   - Hong Kong
   - United Kingdom
   - Other
   - (please specify _____)

Appendix 8.5 The Main Questionnaire for Caucasian Doctors

Diet, Health and the Chinese Community in Britain

Please complete the following questionnaire as fully as possible and *make brief comments after any questions if you wish to do so*

Serial Number _____ Location

Section 1

---

1. Do you treat any patients of Chinese ethnic origin ?

Yes No

If NO, please return the questionnaire in the reply-paid envelope

---

2. Which age group do they most commonly fall into ?

Under 25	56-65
26-35	66-75
36-45	76-85
46-55	Over 85

---

3. What percentage of your patients are of Chinese ethnic origin ?

Over 75%	25-50%
50-75%	Under 25%

---

4. From which country do your Chinese patients originate ?

Mainland China	United Kingdom
Hong Kong	Other (please specify _____)
Malaysia	

---

5. Do you ever see Chinese patients aged over 50 years ?

Yes No

If Yes, what are the problems which these patients present with ?

Section 2

6. If a Chinese patient came to you with one of the following ailments, what would be your first choice of treatment ? Would you

A) Advise them about what to eat and avoid
B) Prescribe medication
C) Advise consultation with a Chinese traditional practitioner
D) Other (please specify)

Ailments	Principal Treatment			
	A	B	C	D
Diabetes				
Hypertension				
Gallstones				
Constipation				
Haemorrhoids				
Diverticulitis				
Stomach cancer				
Anaemia				
Rheumatism				
Arthritis				
Cough				
Common cold				
Sore throat				

7. If a Chinese patient came to you with one of the following ailments, what kinds of foods (including Chinese) and drinks (if any) would you advise them to avoid or consume ?

Ailments	Examples of Chinese Foods	
	Advise	Discourage
Diabetes mellitis		
Gallstones		
Hypertension		
Constipation		
Haemorrhoids		
Diverticulitis		
Stomach cancer		
Anaemia		
Rheumatism		
Arthritis		
Cough		
Common cold		
Sore throat		

8. In what other conditions would you expect to give dietary advice ?

9. Do you ever refer Chinese patients to see a dietitian ?

Yes No

If Yes, for which conditions would you consider a referral ?

If No, why not ? _____

_____

Section 3

10. Do you think herbalists and traditional practitioners have a place in treating certain conditions ?

Yes No

If Yes, for which conditions would you advise your patients to consult either a herbalist or a traditional practitioner?

_____

_____

Section 4

11. Have your Chinese patients tried other remedies before coming to see you ?

Yes No

If Yes, what have they most frequently tried ?

Traditional food remedies

Herbal remedies

Proprietary Western medicine

Other remedies
(please specify _____)

For which conditions are patients most likely to try herbal or traditional food remedies

_____

_____

Section 5

12. Have your Chinese patients ever reported to you any problems that they have encountered during their contact with the National Health Service ?

Yes No Don't know

If Yes, what kind of problems have they encountered ?

_____

_____

---

13. Do you think that counselling and support services for Chinese patients are adequate ?

Yes No Don't know

---

14. Do you feel there is a need for more Chinese interpreters to be employed by the National Health Service ?

Yes No Don't know

---

15. Have you encountered any other difficulties in advising patients of Chinese ethnic origin ?

Yes No

If Yes, what are the difficulties ?

_____

_____

Section 6

---

16. Which of the following ethnic groups do you feel is important for the GP in your area to know most about ?

Asians

Chinese

West Indians

Other
(please specify _____)

---

17. Are you familiar with the idea that in Chinese medicine foods are believed to have 'hot', 'warm' 'neutral' 'cool' and 'cold' qualities according to the effects they have on the body ?

Yes No

If you have answered No, go to Q18.

If Yes, below is a list of food items, please indicate with a tick which foods you think are 'hot', 'warm', 'neutral', 'cool', or 'cold'

Food Item	'Hot'/'Warm'	'Neutral'	'Cool'/'Cold'	Other	Don't Know
White rice, boiled					
Rice congee					
Noodles					
Bread					
Red meat					
Chicken					
Fish					
Duck					
Seafood					
Liver					
Kidney					
Eggs					
Beancurd					
Ginger					
Green Vegetables					
Milk					
Beansprouts					
Chinese cabbage					
Spring onions					
Potatoes					

Food Item	'Hot'/'Warm'	'Neutral'	'Cool'/'Cold'	Other	Don't Know
Most fruits					
Garlic					
Chilli sauce					
Fried foods					
Boiled foods					
Boiled water					

18. Are you familiar with the idea that in Chinese medicine, conditions are classified as being associated with an excess of 'hot','cold', 'wet', 'poisonous' or insufficient energy in the body ?

Yes No

If you have answered No, go to Q19.

If Yes, below is a list of conditions, please indicate by a tick which conditions you consider as being associated with an excess of 'hot', 'cold', 'poisonous' 'wet' energy or insufficient energy in the body

Condition	Xs 'Hot'	Xs 'Cold'	Xs 'Wet'	Xs 'Poison'	Insuff energy	Don't know	Other (specify)
Pregnancy							
Lactation							
Measles							
Cold							
Haemorrhoids							
Diarrhoea							
Constipation							
Arthritis							
Fever							

Diabetes
Liver disease
Renal problems
Obesity
Hypertension
Anaemia
Heart disease
Stomach pain
Rheumatism
Gout

19. Would you like to know more about

	Yes	No
a) Chinese eating habits		
b) Chinese traditonal ideas about diet and health		
c) Patterns of ill health among the Chinese community		

Finally, it would be most helpful if you would provide a little information about yourself. Please tick the appropriate box

---

Section 7

1. Age Group:

25-29	40-44
30-34	45-49
35-39	Over 50

2. Sex: Male Female

3. Place of Birth: _____

THANK YOU VERY MUCH FOR YOUR HELP

Appendix 8.6 The Main Questionnaire for Chinese Doctors

Diet, Health and the Chinese Community in Britain

Please complete the following questionnaire as fully as possible and make brief comments after any questions if you wish to do so

Serial Number _____ **Location**

Section 1

---

1. Do you treat any patients of Chinese ethnic origin ?

Yes **No**

If NO, please return the questionnaire in the reply-paid envelope

---

2. If Yes, what proportion of your patients are of Chinese origin ?

All **Between 1/4 & 1/2**

Over 3/4 **Less than 1/4**

Between 1/2 & 3/4

---

3. From which country do your Chinese patients originate ?

Mainland China **United Kingdom**

Hong Kong **Other**
(please specify _____)

Malaysia

---

4. Do you ever see Chinese patients aged over 50 years ?

Yes **No**

If Yes, what are the problems which these patients present with ?

Section 2

---

5. If a middle-aged Chinese patient came to you with one of the following ailments, what would be your first choice of treatment ? Would you

A) Advise them about what to eat and avoid during illness
B) Prescribe medication
C) Advise consultation with a traditional practitioner

D) Other (please specify)

Ailments	Principal Treatment A	B	C	D
Diabetes				
Hypertension				
Gallstones				
Constipation				
Haemorrhoids				
Diverticulitis				
Stomach cancer				
Anaemia				
Rheumatism				
Arthritis				
Cough				
Common cold				
Sore throat				

6. If a Chinese patient came to you with one of the following ailments, what kinds of foods and drinks (if any) would you advise them to avoid or consume ?

Ailments	Examples of Foods Advise	Discourage
Diabetes mellitis		
Gallstones		
Hypertension		
Constipation		
Haemorrhoids		
Diverticulitis		
Stomach cancer		
Anaemia		
Rheumatism		
Arthritis		
Cough		

Common cold

Sore throat

7. In what other conditions would you expect to give dietary advice ?

8. Do you try to include examples of Chinese foods and drinks when giving dietary advice to your Chinese patients ?

Yes No

If Yes, can you give examples of Chinese foods and drinks which you might advise your patients to advise them to avoid or consume during the following ailments?

Ailments	Examples of Chinese Foods	
	Advise	Discourage
Diabetes mellitis		
Gallstones		
Hypertension		
Constipation		
Haemorrhoids		
Diverticulitis		
Stomach cancer		
Anaemia		
Rheumatism		
Arthritis		
Cough		
Common cold		
Sore throat		

9. As you are aware, in Chinese traditional medicine, foods are classified generally as being 'hot', 'neutral' and 'cold' and diseases as being due to an excess of 'hot', 'cold', 'wet', 'poisonous' or insufficient energy and treatment of diseases are based on consuming foods categorised in the opposite direction. With this in mind, do patients ever question the advice you give them because they believe it is contradictory to their beliefs about diet, health and management of their diseases ?

Yes No

If Yes, how do you deal with this situation ?

_____

_____

10. Do you ever refer Chinese patients to see a dietitian ?

Yes No

If Yes, for which conditions would you consider a referral ?

_____

_____

If No, why not ? _____

_____

Section 3

11. Do you think herbalists and traditional practitioners have a place in treating certain conditions ?

Yes No

If Yes, for which conditions would you advise your patients to consult either a herbalist or a traditional practitioner?

_____

_____

Section 4

12. Have your Chinese patients tried other remedies before coming to see you ?

Often Sometimes

Not usually Don't know

If NO, go to Q7

13. If Yes, what have they most frequently tried ?

Traditional food remedies

Herbal remedies

Proprietary Western medicine

Other remedies
(please specify _____)

For which conditions are patients most likely to try herbal or traditional food remedies

_____

_____

Section 5

14. Do you ever adapt your advice to fit in with your patients' traditional beliefs about diet and health ?

Yes No

If Yes, in what way(s) do you adapt your advice ?

_____

Section 6

15. Have your Chinese patients ever reported to you any problems that they have encountered during their contact with the National Health Service ?

Yes No Don't know

If Yes, what kind of problems have they encountered ?

_____

_____

16. Do you think that counselling and support services for Chinese patients are adequate ?

Yes No Don't know

If No, for what type of patients is extra help needed ?

_____

_____

17. Do you feel there is a need for health education materials to be translated into Chinese ?

Yes No

18. Do you feel there is a need for more Chinese interpreters to be employed by the National Health Service ?

Yes No Don't know

Section 7

Finally, it would be most helpful if you would provide a little information about yourself. Please tick the appropriate box

_____

1. Age Group: 25-29 40-44 30-34
45-49 35-39 Over 50

2. Sex: Male Female

3. Country of Birth:

Mainland China Hong Kong Malaysia

United Kingdom Other
(please specify _____)

4. **Years of Residence in UK:** _____

---

5. **Your Speaking Dialect:**

Cantonese	**Hakka**	**English**
Mandarin	**Other (please specify_____)**	

---

6. **In which country were you educated?**

Mainland China	**Hong Kong**	**Malaysia**
United Kingdom	**Other (please specify _____)**	

THANK YOU VERY MUCH FOR YOUR HELP

Appendix 8.7 Foods Advised for Patients with Diabetes

Diabetes	Food Groups	Examples of English Foods		Examples of Chinese foods	
		Chinese	Caucasian	Chinese	Caucasian
AVOID	Excess Carbohydrates	---	---	Chinese cakes, sweet dimsum, noodles, white rice, yam	---
	Sugar	---	Honey	Chinese sweets	---
	Saturated fats	---	Cholesterol	---	---
	Fatty foods	---	---	Fatty pork, Chinese sausage, pork products, roast pork	
	Salty foods	---		Soya products	
	Beverages	Canned drinks		Sugarcane drinks	
	Alcohol	---		---	
CONSUME	High fibre	Vegetables, fruits, bran, brown rice, brown bread, bananas, celery, spinach	Vegetables, fruit	Chinese cabbage, Chinese green vegetables, Kai Lan	Brown rice
	Meat/Fish/ Poultry	Chicken, fish, lean red meat	Chicken, fish, lean red meat	---	---
	Beverages	---		Chinese tea	
	Pulses/Legumes	---		Beancurd	
	Miscellaneous	Low calorie diet, low carbohydrate diet, low fat diet, low protein diet, high protein diet, weight reducing diet		Noodles	

Appendix 8.8 Foods Advised for Patients with Hypertension

Hypertension	Food Groups	Examples of English Foods		Examples of Chinese Foods	
		Chinese	Caucasian	Chinese	Caucasian
AVOID	Excess Carbohydrates	---	---	---	---
	Sugar	---		---	
	Saturated fats	---	---	---	---
	Fatty foods	---		Roast pork, fatty pork, pork products, Chinese sausage	
	Salty foods	---	---	Salted chicken, preserved fish, salty fish, preserved meat, MSG, bottled sauces, dried seaweed, soya products, dried salted preserved vegetables, tinned salted preserved vegetables	Soya sauce
	Alcohol	---	---	---	---
	Miscellaneous	Hot pepper	Meat	Chinese spices, licorice, "hot" foods	---
CONSUME	High fibre	Vegetables, fruits, bran, brown rice, brown bread, bananas, celery, spinach	Vegetables, fruit	Chinese cabbage, Chinese green vegetables	Brown Rice
	Meat/Fish/Poultry	Chicken,fish,lean red meat	Chicken,fish,lean red meat	---	---
	Pulses/Legumes	---		---	
	Beverages	---		---	
	Fats		PUFA		---
	Miscellaneous	---	Potassium	Chinese mushroom soup	---

Appendix 8.9 Foods Advised for Patients with Haemorrhoids, Constipation and Diverticulitis

Haemorrhoids	Food Groups	Examples of English Foods		Examples of Chinese Foods	
		Chinese	Caucasian	Chinese	Caucasian
Avoid	Sugar	Chocolate	—	—	—
	Saturated fats	—	—	—	—
	Processed foods	—		Instant noodles, white rice	
	Beverages	—		—	
	Spicy foods	—		—	
Consume	High fibre	Vegetables, fruits, bran, brown rice, brown bread, bananas, celery, spinach	Vegetables, fruit	Chinese cabbage, Chinese green vegetables, Kai Lan	Brown rice
	Dairy products	Yogurt, eggs		—	
	Beverages	—	—	—	—
	Miscellaneous	—		Tamarinds	

Appendix 8.9 continued

Constipation	Food Groups	Examples of English Foods		Examples of Chinese Foods	
		Chinese	Caucasian	Chinese	Caucasian
AVOID	Sugar	Chocolate	---	---	---
	Saturated fats	---	---	---	---
	Processed foods	---		Instant noodles, white rice	
	Alcohol	---		---	
CONSUME	High fibre	Vegetables, fruits, bran, brown rice, brown bread, bananas, celery, spinach	Vegetables, fruit	Chinese cabbage, Chinese green vegetables, Kai Lan	Brown rice
	Beverages	Milk	---	---	---

Diverticulitis	Food Groups	Examples of English Foods		Examples of Chinese Foods	
		Chinese	Caucasian	Chinese	Caucasian
AVOID	Saturated fats	---	---	---	---
	Processed foods	---		Instant noodles, white rice	
	Fatty foods	---		---	
	Sugar		---		---
	Miscellaneous	Spicy foods	Spices, pippy foods	---	---
CONSUME	High fibre	Vegetables, fruits, bran, brown rice, brown bread, bananas, celery, spinach	Vegetables, fruit	Chinese cabbage, Chinese green vegetables, Kai Lan	Brown rice
	Beverages	---	---	---	---

Appendix 8.10 Foods Advised for Patients with Anaemia

Anaemia	Food Groups	Examples of English Foods		Examples of Chinese Foods	
		Chinese	Caucasian	Chinese	Caucasian
AVOID	Saturated fats		---		---
CONSUME	High fibre	Vegetables, fruits, brown rice, brown bread, bran, celery, bananas, spinach	Vegetables, fruit	Chinese cabbage, Chinese green vegetables, Kai Lan	Brown rice
	Meat/Fish/ Poultry	Chicken, fish, lean red meat	Chicken, fish, lean red meat	---	---
	Pulses/Legumes	Nuts, lentils		Red beans	
	Offal	Liver, kidneys	Liver	---	---
	Dairy products	Eggs	Eggs	---	---
	Miscellaneous	Iron containing foods e.g. curry	Iron containing foods	Soya sauce Chicken blood	---

Appendix 8.11 Foods Advised for Patients with Gallstones, Stomach Cancer, Rheumatism, Arthritis, Coughs, Colds and Sore throat

Gallstones	Food Groups	Examples of English Foods		Examples of Chinese Foods	
		Chinese	Caucasian	Chinese	Caucasian
AVOID	Sugar	---		---	
	Saturated fats	---	Fried foods	---	---
	Fatty foods	---	Fried foods	Fatty pork, pork products, spring rolls, fried wuntons	---
	Alcohol	---	---	---	---
CONSUME	High fibre		Vegetables, fruit		Brown rice
	Beverages	---		---	

Stomach Cancer	Food Groups	Examples of English Foods		Examples of Chinese Foods	
		Chinese	Caucasian	Chinese	Caucasian
AVOID	Saturated fats	---		---	
	Fatty foods	---		Roast pork, fatty pork, pork products, Chinese sausage	
	Alcohol	---	Spirits	---	---
	Beverages	Coffee		---	
	Miscellaneous	Small frequent meals, spicy foods, nitrite-rich foods		Congee	

App 8.11 Continued

Rheumatism/Arthritis	Food Groups	Examples of English Foods		Examples of Chinese Foods	
		Chinese	Caucasian	Chinese	Caucasian
AVOID	Saturated fats		---		----
	Miscellaneous	Fish, fish oils, chicken		----	
CONSUME	High fibre		Vegetables, fruit		Brown rice

Cough, Cold, Sore throat	Food Groups	Examples of English Foods		Examples of Chinese Foods	
		Chinese	Caucasian	Chinese	Caucasian
AVOID	Fatty foods	Fried foods		---	
	Miscellaneous	Spicy foods, 'hot' foods		---	
CONSUME	Fluids		Hot drinks, Vitamin C		----

Appendix 8.12 Classification by Caucasian Doctors of Food Items (N=7)

Food Items	Hot/Warm	Neutral	Cool/Cold	Other	Don't know
Boiled white rice	0 (0%)	4 (57%)	3 (43%)	0 (0%)	0 (0%)
Rice congee	1 (14%)	2 (29%)	2 (29%)	0 (0%)	2 (29%)
Noodles	2 (29%)	2 (29%)	2 (29%)	0 (0%)	1 (14%)
Bread	1 (14%)	3 (43%)	3 (43%)	0 (0%)	0 (0%)
Red meat	7 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Chicken	3 (43%)	3 (43%)	1 (14%)	0 (0%)	0 (0%)
Fish	0 (0%)	4 (57%)	3 (43%)	0 (0%)	0 (0%)
Duck	7 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Seafood	3 (43%)	1 (14%)	3 (43%)	0 (0%)	0 (0%)
Liver	6 (86%)	0 (0%)	0 (0%)	0 (0%)	1 (14%)
Kidney	7 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Eggs	4 (57%)	1 (14%)	2 (29%)	0 (0%)	0 (0%)
Beancurd	1 (14%)	1 (14%)	5 (72%)	0 (0%)	0 (0%)
Ginger	5 (72%)	1 (14%)	1 (14%)	0 (14%)	0 (14%)
Green leafy vegetables	0 (0%)	3 (43%)	4 (57%)	0 (0%)	0 (0%)
Milk	1 (14%)	5 (72%)	1 (14%)	0 (0%)	0 (0%)
Beansprouts	0 (0%)	2 (29%)	5 (72%)	0 (0%)	0 (0%)
Chinese leaves	1 (14%)	1 (14%)	5 (72%)	0 (0%)	0 (0%)
Spring onions	4 (57%)	1 (14%)	2 (29%)	0 (0%)	0 (0%)
Potatoes	3 (43%)	4 (57%)	0 (0%)	0 (0%)	0 (0%)
Most fruits	3 (43%)	1 (14%)	3 (43%)	0 (0%)	0 (0%)
Garlic	6 (86%)	0 (0%)	1 (14%)	0 (0%)	0 (0%)
Chilli sauce	7 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Fried foods	7 (100%)	0 (0%)	0 (0%)	0 (0%)	0 (0%)
Boiled foods	1 (14%)	5 (72%)	1 (14%)	0 (0%)	0 (0%)
Boiled water	0 (0%)	2 (29%)	5 (62%)	0 (0%)	0 (0%)

Appendix 8.13 Classification by Caucasian Doctors of Conditions (N=3)

Condition	Energy					Other	Don't Know
	Excess Hot	Excess Cold	Excess Wet	Excess Poison	Insufficient Energy		
Pregnancy	1	0	0	1	0	0	1
Lactation	1	1	0	0	0	0	1
Measles	1	0	0	0	1	0	1
Cold	0	1	0	0	1	0	1
Haemorrhoids	3	0	0	0	0	0	0
Diarrhoea	1	1	0	1	0	0	0
Constipation	2	1	0	0	0	0	0
Arthritis	0	1	1	1	0	0	0
Fever	1	0	0	2	0	0	0
Diabetes	0	1	0	1	0	0	1
Liver disease	0	0	0	2	0	0	1
Renal problems	0	0	0	2	0	0	1
Obesity	1	0	0	0	1	0	1
Hypertension	1	0	1	0	0	0	1
Anaemia	0	0	0	0	2	0	1
CHD	1	0	0	1	1	0	1
Stomach pain	1	0	0	1	0	0	1
Rheumatism	0	0	1	1	0	0	1
Gout	0	0	0	2	0	0	1